



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL A. ABRACZINSKAS
Director

XXXX, 2017

Henry Scheller
MDF Plant Manager
Arauco Panels USA, LLC
985 Corinth Rd.
Moncure, North Carolina 27559

SUBJECT: Air Quality Permit No. 03449T46
Facility ID: 1900015
Arauco Panels USA, LLC
Moncure, North Carolina
Chatham County
Fee Class: Title V
PSD Status: Major

Dear Mr. Scheller:

In accordance with your complete Prevention of Significant Deterioration (PSD) permit application received February 13, 2017, we are forwarding herewith Air Quality Permit No. 03449T46 to Arauco Panels USA, LLC, 985 Corinth Road, Moncure, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Chatham County has triggered increment tracking under PSD for PM₁₀, SO₂ and NO_x. However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from XXXX, 2017 until June 30, 2021, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Betty Gatano, P.E. at (919) 707-8736.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section,
Division of Air Quality, NCDEQ

Enclosure

cc: Heather Ceron, EPA Region 4
Connie Horne (cover letter only)
Raleigh Regional Office
Central Files

ATTACHMENT to cover letter to Permit No. 03449T46

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
I-VENTS	Roof ventilators
I-GAS	One 500 gallons above ground gasoline storage tank
I-TANK1, I-TANK2, I-TANK3, I-TANK4	Four, 1000 gallons each, above ground propane storage tanks
I-LPA	Log Processing Area
I-MDFR-1, I-MDFR-2, I-MDFR-3, I-MDFR-4 MACT DDDD	Four MDF Resin Storage Tanks
I-DFF-1 MACT ZZZZ, NSPS IIII	Diesel fuel -fired Fire Pump Engine (347 Brake Horsepower output)
I-ODG MACT ZZZZ	Diesel-fuel Fired Emergency Generator (465 horsepower, 3,026 million Btu per hour heat input)
I-Irrigation fugitive	Spray Irrigation Field Fugitives
I-Wastewater ponds	Fugitives from wastewater lagoons

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit".
3. For additional information regarding the applicability of MACT see the DAQ page titled "The Regulatory Guide for Insignificant Activities/Permits Exempt Activities". The link to this site is as follows:
<http://daq.state.nc.us/permits/insig/>

ATTACHMENT to cover letter to Air Quality Permit No. 03449T46

Table of Changes

Pages	Section	Description of Changes
Cover and throughout	--	Updated all dates and permit revision numbers.
Table of Contents	--	Added Section 2.3, "Schedule of Compliance," and renumbered the table accordingly.
3 – 7	1.0 Equipment List	Added PSD labels on all emission sources in the MDF plant.
9	2.1 B – Regulations Table	<ul style="list-style-type: none"> Removed reference to 15A NCAC 02D .0958. The rule is no longer applicable state-wide, effective November 1, 2016. Added reference to BACT limits for the MDF plant under 15A NCAC 02D .0530, PSD. Added reference to a Schedule of Compliance for the MDF plant.
12 – 13	2.1 C – Regulations Table	<ul style="list-style-type: none"> Removed reference to 15A NCAC 02D .0958. The rule is no longer applicable state-wide, effective November 1, 2016. Added reference to VOC to CAM regulations. Added reference to BACT limits under 15A NCAC 02D .0530, PSD. Added reference to a Schedule of Compliance for the MDF plant.
15	2.1 C.3.a	Added the two-stage dryer system (ID No. ES-02-B) with two backup natural gas-fired burners (ID Nos. ES-02-C and ES-02-D) to Section 2.1 C.3.a because these emission sources are subject to 15A NCAC 02D .0516. No monitoring, reporting, or recordkeeping is required to demonstrate compliance.
15	2.1 C.4.a	Removed reference to venturi scrubber (ID No. CD16). This control device was reconfigured under Air Permit No. 03449T45 and no longer acts as an air emissions control device.
16 – 17	2.1 C.5	Added CAM permit condition for VOCs.
18	2.1 D – Regulations Table	<ul style="list-style-type: none"> Removed reference to 15A NCAC 02D .0958. The rule is no longer applicable state-wide, effective November 1, 2016. Added reference to BACT limits under 15A NCAC 02D .0530, PSD. Added reference to a Schedule of Compliance for the MDF plant.
23	2.1 E – Regulations Table	Removed reference to 15A NCAC 02D .0958. The rule is no longer applicable state-wide, effective November 1, 2016.
39	2.1 F – Regulations Table	Removed reference to 15A NCAC 02D .0958. The rule is no longer applicable state-wide, effective November 1, 2016.
45	2.1 I – Regulations Table	<ul style="list-style-type: none"> Added reference to BACT limits under 15A NCAC 02D .0530, PSD. Added reference to a Schedule of Compliance for the MDF plant.
47	2.2 A – Regulations Table	Removed reference to 15A NCAC 02D .0958. The rule is no longer applicable state-wide, effective November 1, 2016.
47	2.2 A.1	<ul style="list-style-type: none"> Removed permit condition for 15A NCAC 02D .0958. The rule is no longer applicable state-wide, effective November 1, 2016. Renumbered permit accordingly.
50 – 52	2.2 B.1	Removed VOC emissions from PSD avoidance condition.
52 – 54	2.2 B.2	Added a permit condition for BACT for VOC emissions from MDF Plant.
55	2.3	Added Schedule of Compliance for the MDF Plant and renumbered permit accordingly.
57 - 66	3.0	Updated the General Conditions and the list of Acronyms with the most current version (Version 5.0 06/08/2017)



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
03449T46	03449T45	XXXX 2017	June 30, 2021

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: Arauco Panels USA, LLC
Facility ID: 1900015

Facility Site Location: 985 Corinth Road
City, County, State, Zip: Moncure, Chatham County, North Carolina 27559

Mailing Address: 985 Corinth Road
City, County, State, Zip: Moncure, Chatham County, North Carolina 27559

Application Number: 1900015.17A
Complete Application Date: February 13, 2017

Primary SIC Codes: 2493

**Division of Air Quality,
Regional Office Address:** Raleigh Regional Office
3800 Barrett Drive, Suite 101
Raleigh, North Carolina 27609

Permit issued this the XXXth day of XXXX, 2017

William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

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- 2.3 - Schedule of Compliance
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SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT

List of Acronyms

SECTION 1 - PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Material Handling Sources			
7001 or SP-1 MACT DDDD	Truck/Rail Chip Handling System, Enclosed	N/A	N/A
7004 or SP-2 MACT DDDD	Truck/Rail Sawdust Handling System, Enclosed	N/A	N/A
7010 MACT DDDD	Particle Board Mill Truck Dump	N/A	N/A
7012, 7014, 7015, 7029 MACT DDDD	Dump bunkers and CL dryer dump	N/A	N/A
7052, 7054, 7055, 7056 MACT DDDD	Wood residue bunkers	N/A	N/A
6001, 7002-A, 7002-B, 7002-C, 7002-D MACT DDDD	Wood chip piles - Medium Density Fiberboard Mill	N/A	N/A
6003, 7006, 7007, 7022 MACT DDDD	Wood Fuel Pad and Boiler Transfers	N/A	N/A
7005-D, 7005-E, 7005-F, 7005-G MACT DDDD	Sawdust transport to A-frame	N/A	N/A
7025 MACT DDDD	Scale transfer conveyors	N/A	N/A
7019, 7026 MACT DDDD	Fiber dump and reject filter bins	N/A	N/A
7027 MACT DDDD	Hog fuel hopper	N/A	N/A
7040, 7044, 7046, 7048, 7050 MACT DDDD	Particleboard Mill chip transfer	N/A	N/A
SP MACT DDDD	Fuel Sawdust and Chip Storage Piles	N/A	N/A
7024 MACT DDDD	Particleboard Mill feed bins	N/A	N/A
Medium Density Fiberboard (MDF) Facilities			
ES-01 PSD MACT DDDD	Refiner	CD01	Refiner Abort Cyclone (66 inches in diameter) ¹
		CD02 in series with CD18	Venturi scrubber
		CD14 In series with CD18	Biofilter
			Venturi scrubber
			Biofilter

¹ For operation during startup, shutdown and malfunction only.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-18, ES-19, and ES-20 PSD NSPS Dc Case-by-Case MACT	Three natural gas-fired hot oil heaters (24 million Btu per hour maximum heat input each)	N/A	N/A
ES-02-A PSD MACT DDDD	Energy System consisting of one dry/wet wood/ woodwaste-fired burner (205 million Btu per hour heat input)	CD02-A	Urea/water injection system
		CD02 In series with CD18	Venturi scrubber Biofilter
		CD14 In series with CD18	Venturi scrubber Biofilter
ES-02-B and ES-02-C and ES-02-D PSD MACT DDDD	Two Stage Dryer System and Two backup natural gas-fired dryer burners (78.5 and 17 million Btu per hour heat input respectively)	CD02 In series with CD18	Venturi scrubber Biofilter
		CD14 In series with CD18	Venturi scrubber Biofilter
ES-16 PSD MACT DDDD	MDF Press	CD02 In series with CD18	Venturi scrubber Biofilter
		CD14 In series with CD18	Venturi scrubber Biofilter
ES-06-B PSD MACT DDDD	MDF Board Cooler and Press Hall	CD02 In series with CD18	Venturi scrubber Biofilter
		CD14 In series with CD18	Venturi scrubber Biofilter
ES-03 PSD MACT DDDD	Fiber Sifter System	CD03	Fabric Filter (12,290 square feet of filter area)
ES-04 PSD MACT DDDD	Forming Line Clean-Up System	CD04	Fabric Filter (9,346 square feet of filter area)
ES-05 PSD MACT DDDD	Mat Reject System	CD05	Fabric Filter (9,346 square feet of filter area)
ES-07 PSD MACT DDDD	Saw System	CD07	Fabric Filter (6793 square feet of filter area)
ES-08 PSD MACT DDDD	Sander System No.1	CD08	Fabric Filter (12,290 square feet of filter area)
ES-09 PSD MACT DDDD	Recycled Fiber Silo No.1	CD09	Bin Vent Filter (226 square feet of filter area)
ES-10 PSD MACT DDDD	Sander System No. 2	CD10	Fabric Filter (12,290 square feet of filter area)
ES-12 PSD MACT DDDD	Sander Dust Silo No. 1	CD12	Bin Vent Filter (226 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-13 PSD MACT DDDD	Dry Sawdust Silo	CD13	Bin Vent Filter (226 square feet of filter area)
ES-15 PSD MACT DDDD	Recycled Fiber Silo No. 2	CD15	Bin Vent Filter (226 square feet of filter area)
ES-17 PSD MACT DDDD	Sander Dust Silo No. 2	CD17	Bin Vent Filter (226 square feet of filter area)
ES-21 PSD MACT ZZZZ	Diesel Fuel-fired Emergency Generator(1592 Brake Horsepower output)	N/A	N/A
Particleboard Mill			
3501 PSD MACT DDDD	Sawdust Rock and Metal Separator	CD-SC CD-3501	High efficiency cyclone - 72 inches in diameter Reverse flow bag filter with 2,410 square feet of surface area
1430 PSD MACT DDDD	Surface layer triple pass, rotary drum (#3) dryer with one wood suspension dust/natural gas-fired burner (60 million Btu per hour maximum rated heat input)	CD-1431 CD-PB-WESP CD-PB-PGT	High efficiency multi-cyclone with 2 tubes, each 132 inches in diameter Wet electrostatic precipitator Packed bed scrubber with photochemical gas treatment
1420 PSD MACT DDDD	Core layer single pass, rotary drum (#1) dryer with one wood suspension dust/natural gas-fired burner (50 million Btu per hour maximum rated heat input)	CD-1421 CD-PB-WESP CD-PB-PGT	High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter Wet electrostatic precipitator Packed bed scrubber with photochemical gas treatment
1410 PSD MACT DDDD	Core layer single pass, rotary drum (#2) dryer with one wood suspension dust/natural gas-fired burner (50 million Btu per hour maximum rated heat input)	CD-1411 CD-PB-WESP CD-PB-PGT	High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter Wet electrostatic precipitator Packed bed scrubber with photochemical gas treatment

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
3201 PSD MACT DDDD	One "Wellons" unit operating as a:	CD-1431	High efficiency multi-cyclone with 2 tubes, each 132 inches in diameter
	a) wood suspension dust -fired burner (40 million Btu per hour maximum rated heat input); or a	AND/OR	
	b) natural gas-fired burner (21.8 million Btu per hour maximum rated heat input);	CD-1421	High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter
	exhausting to either	AND/OR	
	surface layer triple pass, rotary drum (#3) dryer [ID No. 1430] and/or	CD-1411,	High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter
	core layer single pass, rotary drum (#1) dryer [ID No. 1420] and/or	AND	
	core layer single pass, rotary drum (#2) dryer [ID No. 1410]	CD-PB-WESP	Wet electrostatic precipitator
		CD-PB-PGT	Packed bed scrubber with photochemical gas treatment
3201 MACT DDDDD	One "Wellons" unit operating as a:	N/A	N/A
	c) natural gas -fired indirect heat exchanger (21.8 million Btu per hour maximum rated heat input)		
3515 PSD MACT DDDD	Surface Material Transport (SL fines from screening operation)	CD-3500,	Simple cyclone - 72 inches in diameter
		CD-3525	Reverse flow fabric filter with 6,918 square feet of surface area
		CD-3512B	Simple cyclone - 72 inches in diameter
		CD-3515	Reverse flow fabric filter with 5,767 square feet of surface area
3525 PSD MACT DDDD	Surface Formers and Mat Dumps	CD-3520A, CD-3520B, CD-3521	Three (3) simple cyclones - each 96 inches in diameter
		CD-3525	Reverse flow fabric filter with 6,918 square feet of surface area
3535 PSD MACT DDDD	Flying Cut Off Saw, Pretrim Saws, & Production Collection	CD-3530	Simple cyclone - 84 inches in diameter
		CD-3531	Simple cyclone - 108 inches in diameter
		CD-3533	Simple cyclone - 108 inches in diameter
		CD-3535	Reverse flow fabric filter with 6,918 square feet of filter area

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
3545 PSD MACT DDDD	Particleboard Mill Steinemann Finishing Sander	CD-2006	Reverse flow bag filter with 6,918 square feet of surface area
		CD-3570	High efficiency cyclone - 144 inches in diameter
		CD-3575	Reverse flow bag filter with 1,159 square feet of surface area
DEF- 2010 PSD MACT DDDD	Particleboard Press	CD-PB-PGT	Packed bed scrubber with photochemical gas treatment
PB-BC PSD MACT DDDD	Particleboard Cooler	N/A	N/A
3565 PSD MACT DDDD	Particleboard Mill Steinemann Calibrating Sander	CD-5001	Reverse flow fabric filter with 6,918 square feet of surface area
		CD-3570	High efficiency cyclone - 144 inches in diameter
		CD-3575	Reverse flow bag filter with 1,159 square feet of surface area
3555 PSD MACT DDDD	Schelling Saw Board Trim	CD-3522	High efficiency cyclone - 120 inches in diameter
		CD-4005	Reverse flow bag filter with 6,918 square feet of surface area
3575 PSD MACT DDDD	Sander Filter Transport for Filters 3545 & 3565	CD-3570	High efficiency cyclone - 144 inches in diameter
		CD-3575	Reverse flow bag filter with 1,159 square feet of surface area
3585 PSD MACT DDDD	PZKR Green Chip Flakers	CD-3585	Reverse flow bag filter with 4,880 square feet of surface area
3595 MACT DDDD	Oversize Material Pallmann Mill	CD-3595	Reverse flow bagfilter (Maximum air-to-cloth ratio of 3.0 ACFM/total filter surface area).
3577 PSD MACT DDDD	Dry waste transport system	CD-3532	Simple cyclone - 60 inches in diameter
		CD-3577	Reverse flow bag filter with 4,068 square feet of surface area
Laminator Mill			
3593 and 3594	Two (2) Short Cycle Laminating Presses	CD-3593	Reverse flow bagfilter (Maximum air-to-cloth ratio of 4.1 ACFM/total filter surface area).
Pr-Heat1 Case-by-Case MACT	Natural gas or No. 2 fuel oil-fired hot oil heater (4.7 million Btu per hour heat input) used with short cycle laminating presses	N/A	N/A

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 - Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, record keeping, and reporting requirements as specified herein:

A. The following Material Handling Sources:

Table 2.1.A.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
7001 or SP-1	Truck/Rail Chip Handling System, Enclosed	N/A	N/A
7004 or SP-2	Truck/Rail Sawdust Handling System, Enclosed	N/A	N/A
7010	Particle Board Mill Truck Dump	N/A	N/A
7012, 7014, 7015, 7029	Dump bunkers and CL dryer dump	N/A	N/A
7052, 7054, 7055, 7056	Wood residue bunkers	N/A	N/A
6001, 7002-A, 7002-B, 7002-C, 7002-D	Wood chip piles - Medium Density Fiberboard Mill	N/A	N/A
6003, 7006, 7007, 7022	Wood Fuel Pad and Boiler Transfers	N/A	N/A
7005-D, 7005-E, 7005-F, 7005-G	Sawdust transport to A-frame	N/A	N/A
7025	Scale transfer conveyors	N/A	N/A
7019, 7026	Fiber dump and reject filter bins	N/A	N/A
7027	Hog fuel hopper	N/A	N/A
7040, 7044, 7046, 7048, 7050	Particleboard Mill chip transfer	N/A	N/A
SP	Fuel Sawdust and Chip Storage Piles	N/A	N/A
7024	Particleboard Mill feed bins	N/A	N/A

The following table provides a summary of limits and/or standards for the material handling sources.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible emissions	20 percent opacity	15A NCAC 02D .0521
HAPs	No applicable requirements	15A NCAC 02D .1111
Odors	<u>State Enforceable Only</u> Odorous emissions must be controlled - See Section 2.2. A.2	15A NCAC 02D .1806

1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of the test performed exceed the limits given in Section 2.1. A.1.a. (above) for visible emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, record keeping, or reporting is required for visible emissions from these emission sources.

B. Medium Density Fiberboard Facilities woodworking operations as presented in Table 2.1.B.

Table 2.1.B.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-03	Fiber Sifter System	CD03	Fabric Filter (12,290 square feet of filter area)
ES-04	Forming Line Clean-Up System	CD04	Fabric Filter (9,346 square feet of filter area)
ES-05	Mat Reject System	CD05	Fabric Filter (9,346 square feet of filter area)
ES-07	Saw System	CD07	Fabric Filter (6,793 square feet of filter area)
ES-08	Sander System No. 1	CD08	Fabric Filter (12,290 square feet of filter area)
ES-09	Recycled Fiber Silo No. 1	CD09	Bin Vent Filter (226 square feet of filter area)
ES-10	Sander System No. 2	CD10	Fabric Filter (12,290 square feet of filter area)
ES-12	Sander Dust Silo No. 1	CD12	Bin Vent Filter (226 square feet of filter area)
ES-13	Dry Sawdust Silo	CD13	Bin Vent Filter (226 square feet of filter area)
ES-15	Recycled Fiber Silo No. 2	CD15	Bin Vent Filter (226 square feet of filter area)
ES-17	Sander Dust Silo No. 2	CD17	Bin Vent Filter (226 square feet of filter area)

The following table provides a summary of limits and/or standards for the woodworking operations in Table 2.1.B.

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	adequate duct work and properly designed collectors	15A NCAC 02D .0512
Visible emissions	20 percent opacity	15A NCAC 02D .0521
HAPs	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products See Section 2.2 A.1	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDD)
Odors	<u>State Enforceable Only</u> See Section 2.2 A.2	15A NCAC 02D .1806
NO _x , PM _{2.5} , PM ₁₀	See Section 2.2 B.1.	15A NCAC 02Q .0317 (PSD Avoidance)
VOCs	Best Available Control Technology See Section 2.2 B.2.	15A NCAC 02D .0530
HAPs VOCs	Schedule of Compliance See Section 2.3	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDD) 15A NCAC 02D .0530

1. 15A NCAC 02D .0512: PARTICULATES FROM WOOD PRODUCTS FINISHING PLANTS

- a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

Monitoring [15A NCAC 02Q .0508(f)]

- b. Particulate matter emissions from the MDF wood working operations shall be controlled as presented in **Table 2.1.B.** To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
 - i. monthly external inspection of the ductwork, cyclones, and bagfilters noting the structural integrity; and
 - ii. annual (for each 12 month period following the initial inspection) internal inspection of the bagfilters noting the structural integrity and the condition of the filters.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the ductwork, cyclones and/or bagfilters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- c. The results of inspection and maintenance for the cyclones and bagfilters shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection; and
 - iii. the results of maintenance performed on any control device.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if these records are not maintained.

Reporting [15A NCAC 02Q .0508 (f)]

- d. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the MDF wood working operations **listed in Table 2.1.B.** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a week the Permittee shall observe the emission points of these sources for any visible emissions above normal. The weekly observations must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.2.a. above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

C. Medium Density Fiberboard Facilities Operations as presented in Table 2.1.C.

Table 2.1.C.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description	Emission Point*
ES-01	Refiner	CD01	Refiner Abort Cyclone (66 inches in diameter) ²²	EP01
		CD02 in series with CD18	Venturi scrubber Biofilter	EP02 / EP18
		CD14 In series with CD18	Venturi scrubber Biofilter	EP14/ EP18
ES-02-A	Energy System consisting of a dry/wet wood/woodwaste-fired burner (205 million Btu per hour heat input)	CD02-A	Urea/water injection system	EP02 / EP14 / EP18
		CD02 In series with CD18	Venturi scrubber Biofilter	EP02 / EP18
		CD14 In series with CD18	Venturi scrubber Biofilter	EP14 / EP18
ES-02-B	Two Stage Dryer System	CD02 In series with CD18	Venturi scrubber Biofilter	EP02 / EP18
ES-02-C and ES-02-D	Two backup natural gas-fired dryer burners (78.5 and 17 million Btu per hour heat input respectively)	CD14 In series with CD18	Venturi scrubber Biofilter	EP14 /EP18
ES-06-B	MDF Board Cooler and Press Hall			
ES-16	MDF Press	CD02 In series with CD18	Venturi scrubber Biofilter	EP02 / EP18
		CD14 In series with CD18	Venturi scrubber Biofilter	EP14 /EP18

*Emission Points EP02 and EP14 will exhaust to the inlet of the biofilter (CD18) once installed.

The following table provides a summary of limits and/or standards for the operations in Table 2.1.C.

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	$E = 4.10P^{0.67}$ or $E = 55.0(P)^{0.11} - 40$ where; E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
PM VOCs	Compliance Assurance Monitoring	15A NCAC 02D .0614: [40 CFR 64]
HAPs	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products See Section 2.2 A.1	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDD)

² For operation during startup, shutdown and malfunction only.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	State Enforceable Only See Section 2.2 A.2	15A NCAC 02D .1806
NO _x , PM _{2.5} , PM ₁₀	See Section 2.2 B.1.	15A NCAC 02Q .0317 (PSD Avoidance)
VOCs	Best Available Control Technology See Section 2.2 B.2.	15A NCAC 02D .0530
HAPs VOCs	Schedule of Compliance See Section 2.3	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDD) 15A NCAC 02D .0530

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the emission sources in Table 2.1.C. shall not exceed an allowable emission rate as calculated by the following equation(s):

Process Rate	Allowable Emission Rate Equation
Less than or equal to 30 tons per hour	$E = 4.10 \times P^{0.67}$
Greater than 30 tons per hour	$E = 55.0(P)^{0.11} - 40$

Where E = allowable emission rate in pounds per hour
 P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit above on an annual basis by testing the emission points EP02 and EP14 in accordance with General Condition JJ. If the results of these tests are less than 80 percent of the emission limit above, the Permittee shall be required to stack test only once every five years following the previous stack test. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.
- i. Upon installation of the biofilter (**ID No. CD18**), the Permittee need only test EP18 if desired.

Monitoring [15A NCAC 02Q .0508(f)]

- d. Particulate matter emissions from these sources shall be controlled by the venturi scrubbers as described in Table 2.1.C.
- e. The Permittee shall perform inspections and maintenance as recommended by the manufacturer.
- f. The Permittee shall install, operate, and maintain instrumentation on the scrubbers identified in Table 2.1.C. to continuously monitor the parameters in Table 2.1.C.1.f. and maintain the parameters in the associated operating ranges. If the Permittee re-evaluates compliance with the emission limit in condition a. at parameter ranges outside of those in Table 2.1.C.1.f. below, the Permittee shall, upon approval by the DAQ, attach the approval memo containing the revised operating parameters to this permit and maintain the parameters in the associated operating ranges contained therein.

Table 2.1.C.1.f

Parameter	Control Device ID No.	Operating range, per control device
Pressure drop (inches of water gauge, 3-hour block average)	CD02	6.5
	CD14	6.5
Recirculating liquid flow rate (gallons per minute, 3-hour block average)	CD02	378
	CD14	416

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the monitoring requirements in conditions d. through f. are not met.

Recordkeeping [15A NCAC 02Q .0508(f)]

- g. The results of any monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the control devices;
 - iv. any variance from manufacturer's recommendations, if any, and corrections made; and
 - v. pressure drop, and recirculating flow rate, (3-hour block averages) for each venturi scrubber.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the recordkeeping requirements in condition e. are not met.

Reporting [15A NCAC 02Q .0508(f)]

- h. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the emission sources in Table 2.1.C. shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a week the Permittee shall observe the emission points (EP02 and EP14) for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. The Permittee shall re-establish "normal" within 30 days after the initial operation of the biofilter (**ID No. CD18**) by observing emission point EP18. Weekly observations will be made on EP18 afterwards. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in condition a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from the Energy System (**ID No. ES-02-A**) and the two stage dryer system (**ID No. ES-02-B**) with two backup natural gas-fired burners (**ID Nos. ES-02-C and ES-02-D**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping or reporting is required for sulfur dioxide emissions from wood combustion for these sources.

4. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING [40 CFR 64]

- a. Pursuant to 40 CFR 64 and 15A NCAC 02D .0614, the Permittee shall comply with the conditions below for the Pollutant Specific Emission Unit(s) controlled by the venturi scrubbers (**ID Nos. CD02 and CD14**).

Emission Limitations/Standards

- b. The following table presents the regulated pollutants and the associated emission limitations/standards:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	See Section 2.1 C.1	15A NCAC 02D .0515

Monitoring Approach [15A NCAC 02Q .0508(f), 40 CFR 64.6]

- c. The key elements of the monitoring approach for PM, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

Monitoring Elements	Indicator No. 1	Indicator No. 2
Measurement Approach [64.6(c)(1)(i), (ii)]	Injection rate measurements are made every 15 minutes	Pressure drop measurements are made every 15 minutes
Indicator Range [64.6(c)(2)]	An excursion is defined as a one-hour block average injection rate reading lower than the respective 3-hour block average reading listed in Table 2.1.C.1.f. of this permit. Excursions trigger an inspection and corrective action.	An excursion is defined as a one-hour block average pressure drop reading lower than the respective 3-hour block average reading listed in Table 2.1.C.1.f. of this permit. Excursions trigger an inspection and corrective action.
QIP threshold [64.8]	The QIP threshold is six excursions in a six-month reporting period.	The QIP threshold is six excursions in a six-month reporting period.
Data Representativeness [64.6(c)(1)(iii), 64.3(b)(1)]	Measurements are made once every 15 minutes and complied into the appropriate averaging periods.	Measurements are made once every 15 minutes and complied into the appropriate averaging periods.
Verification of Operational Status [64.3(b)(2)]	Monitoring shall be required upon issuance of permit no. <u>03449T45</u>	

Monitoring Elements	Indicator No. 1	Indicator No. 2
QA/QC Practices and Criteria [64.3(b)(3)]	Flowmeter calibration shall be performed according to manufacturer recommendations.	Pressure transducer calibration shall be performed according to manufacturer recommendations.
Monitoring frequency [64.3(b)(4)]	Measurements are made by a computerized data acquisition and handling system once every 15 minutes and complied into the appropriate averaging periods.	
Data collection procedure [64.3(b)(4)]	Non-SSM periods when flowrate or pressure drop falls below the acceptable ranges for more than one -hour will be documented. An electronic or written logbook will be kept of all control device inspections and corrective actions	

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 64.9]

- d. The owner or operator shall maintain records of the following:
- Date and time and results of all monitoring activities;
 - Information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - Maintenance records of the differential pressure gauge; and
 - Written QIP required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan

Reporting Requirements [15A NCAC 02Q .0508(f), 40 CFR 64.9]

- e. The Permittee shall submit a summary report of all monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations for the requirements of this permit must be clearly identified. At a minimum, the report shall include the following elements:
- Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

5. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING [40 CFR 64]

- a. Pursuant to 40 CFR 64 and 15A NCAC 2D .0614, the Permittee shall comply with the conditions below for the Pollutant Specific Emission Unit(s) controlled by the biofilter (**ID No. CD-18**).

Emission Limitations/Standards

- b. The following table presents the regulated pollutants and the associated emission limitations/standards:

Regulated Pollutant	Limits/Standards	Applicable Regulation
VOCs	Best Available Control Technology See Section 2.2 B.2.	15A NCAC 02D .0530

Monitoring Approach [15A NCAC 02Q .0508(f), 40 CFR 64.6]

- c. The key elements of the monitoring approach for VOC, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

Monitoring Elements	Indicator
Measurement Approach [64.6(c)(1)(i), (ii)]	Temperature readings as provided by thermocouples located in the biofilter bed. [40 CFR 63.2262(m)]
Indicator Range [64.6(c)(2)]	<p>Establish minimum and maximum 15-minute biofilter bed temperatures monitored during required performance test runs. [40 CFR 63.2262(m)]</p> <p>The indicator range for the minimum and maximum biofilter bed temperature is the 24-hour block average as specified in 40 CFR 63.2270</p> <p>The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530, if the biofilter bed minimum and maximum temperatures are outside the indicator range,</p>
QIP threshold [64.8]	Not Applicable
Data Representativeness [64.6(c)(1)(iii), 64.3(b)(1)]	<p>Thermocouples will be installed in representative locations throughout the biofilter bed, in accordance with manufacturer specifications and recommendations, to accurately record the temperature in the biofilter bed. This data will be captured and stored electronically to yield 24-hour block averages to show compliance with 40 CFR Part 63 Subpart DDDD. [40 CFR 63.2262(m)(1), 15A NCAC 02D .0530]</p> <p>The thermocouples will be installed in positions that provide a representative temperature. The temperature sensors will have a minimum accuracy of 4 °F or 0.75% of the temperature value, whichever is larger. [40 CFR 63.2269(b)(1) and (2)]</p>
Verification of Operational Status [64.3(b)(2)]	Monitoring shall be required upon issuance of Air Quality Permit No. 03449T46 .
QA/QC Practices and Criteria [64.3(b)(3)]	<p>The Permittee will conduct a repeat performance test every two (2) years following the previous test and 180 days of replacement of the biofilter media. [Table 7 to 40 CFR 63, Subpart DDDD]</p> <p>The Permittee will perform an electronic calibration semiannually according to the manufacturer's owner's manual, and will also perform a temperature sensor validation check. The Permittee will inspect the thermocouples quarterly for integrity and for corrosion. [40 CFR 63.2269(b)(4) and (6)]</p>
Monitoring frequency [64.3(b)(4)]	At least once every 15 minutes. [40 CFR 63.2269(a)]
Data collection procedure [64.3(b)(4)]	Temperature data will be logged in the facility's data historian and aggregated into 24-hour block averages. [Table 2 to 40 CFR 63, Subpart DDDD]

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 64.9]

- e. The Permittee shall maintain records of the following:
 - i. Date and time and results of all monitoring activities;
 - ii. Information on the number, duration and cause (including unknown cause, if applicable) of exceedances and the corrective actions taken; and
 - iii. Maintenance records of the differential pressure gauge.

Reporting Requirements [15A NCAC 02Q .0508(f), 40 CFR 64.9]

- f. The Permittee shall submit a summary report of all monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations for the requirements of this permit must be clearly identified. At a minimum, the report shall include the following elements:
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of exceedances, and the corrective actions taken; and
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable).

D. The following sources for the Medium Density Fiberboard Facilities

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-18, ES-19, and ES-20 NSPS Dc Case-by-Case MACT	Three natural gas-fired hot oil heaters (24 million Btu per hour maximum heat input each)	NA	NA

The following table provides a summary of limits and/or standards for the emission sources above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	0.35 pounds per million Btu heat input	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
NA	Notification and Recordkeeping	15A NCAC 02D .0524 (NSPS Subpart Dc)
HAPs	Best Combustion Practices	15A NCAC 02D .1109
HAPs	One time initial energy assessment Annual tune ups <u>Compliance date: May 20, 2019</u>	15A NCAC 02D .1111
Odors	<u>State-Enforceable Only</u> See Section 2.2 A.2	15A NCAC 02D .1806
NOx, PM _{2.5} , PM ₁₀	See Section 2.2 B.1.	15A NCAC 02Q .0317 (PSD Avoidance)
VOCs	Best Available Control Technology See Section 2.2 B.2.	15A NCAC 02D .0530
HAPs VOCs	Schedule of Compliance See Section 2.3	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDD) 15A NCAC 02D .0530

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of natural gas that are discharged from this source into the atmosphere shall not exceed 0.35 pounds per million Btu heat input.

Testing [15A NCAC 02Q. 0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in this source.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from natural gas combustion for this source.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in this source.

4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units" including Subpart A "General Provisions."

Recordkeeping Requirements [15A NCAC 02Q .0508(f)]

- b. Pursuant to 40 CFR 60.48c(g)(2), the Permittee shall record and maintain records of the amount of fuel combusted during each calendar month. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

5. 15A NCAC 02D .1109: Case-by-Case MACT FOR BOILERS AND PROCESS HEATERS

- a. The Permittee shall use best combustion practices when operating the affected heaters (**ID Nos. ES-18, ES-19 and ES-20**). The initial compliance date for this work practice standard and the associated monitoring, recordkeeping, and reporting requirements is **October 18, 2013**. These conditions need not be included on the annual compliance certification until after the initial compliance date.
- i. The Permittee shall comply with this CAA §112(j) standard through **May 19, 2019**. The initial compliance date for the applicable CAA §112(d) standard for "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters" is **May 20, 2019**, as specified in Section 2.1.D.6 below.

Monitoring/Recordkeeping

- b. To ensure compliance, the Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
 - i. Inspect the burner, and clean or replace any components of the burner as necessary;
 - ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,
 - iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the affected heaters are not inspected and maintained as required above.

- c. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date of each recorded action;
 - ii. The results of each inspection; and,
 - iii. The results of any maintenance performed on the heaters.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- d. No reporting is required.

6. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, §63.7490(d), §63.7499(l)]

- a. For these sources (existing sources(s) designed to burn gas 1 fuels with a heat input capacity equal to or greater than 10 million Btu per hour), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63 Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."
- i. The Permittee shall comply with the CAA §112(j) standard in Section 2.1.D.5 through **May 19, 2019**. The Permittee shall be subject to the requirements of this standard starting May 20, 2019. Note that the requirements of this standard may require action on behalf of the Permittee prior to May 20, 2019.

Definitions and Nomenclature [§63.7575]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [§63.7565]

- c. The Permittee shall comply with the requirements of 40 CFR Part 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63 Subpart DDDDD.

Compliance Date [40 CFR 63. 7510(e), §63.56(b)]

- d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019.

Notifications [§63.7545(e)(8), §§63.7530(e),(f)]

- e. The Permittee shall submit a Notification of Compliance Status. The notification must be signed by a responsible official and sent before the close of business on the 60th day following the completion of the initial tune up and one time energy assessment (whichever is later). The notification shall contain the following:
 - i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.
 - ii. the following certification(s) of compliance, as applicable:
 - (A) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63 Subpart DDDDD at the site according to the procedures in.40 CFR 63.7540(a)(10)(i) through (vi)' [i.e., conditions g.i. through g.v. and l. ii.]; and
 - (B) "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)" [i.e., condition k.] and is an accurate depiction of the facility at the time of the assessment.

General Compliance Requirements [§63.7505(a), §63.7500(f)]

- f. The Permittee shall be in compliance with the work practice standards in this subpart. These standards apply at all times the affected unit is operating.

Work Practice Standards [15A NCAC 02Q .0508(f)]

- g. The Permittee shall conduct a tune-up of the source(s) annually as specified below.
 - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown;

- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown);
- iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject; and
- v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
[§§63.7500(a), (e), §63.7540(a)(10)]
- h. Each annual tune-up shall be conducted no more than 13 months after the previous tune-up. [40CFR 63.7515(d)]
- i. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [§63.7540(a)(13), §63.7515(g)]
- j. At all times, the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[§63.7500(a)(3)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in conditions c. through j. are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(f)]

- k. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR Part 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in §63.7575:
[§63.7500(a)(1), Table 3]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in condition k. are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

- l. The Permittee shall keep the following:
 - i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
[40 CFR 63.7555(a)(1)]
 - ii. maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
 - (A) the concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the source;
 - (B) a description of any corrective actions taken as a part of the combustion adjustment; and
 - (C) the type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
[40 CFR 63.7540(a)(10)(vi)]
 - iii. the associated records for conditions f. through k. including:
 - (A) the occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment.
[40 CFR 63.10(b)(2)(ii)]
 - iv. records of the calendar date, time, occurrence and duration of each startup and shutdown. [40 CFR 63.7555(i)]
 - v. records of the type(s) and amount(s) of fuels used during each startup and shutdown. [40 CFR 63.7555(j)]

- m. The Permittee shall:
 - i. maintain records in a form suitable and readily available for expeditious review;
 - ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
 - iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.
- [40 CFR 63.7560, 63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in conditions l. through m.

Reporting Requirements [15A NCAC 02Q .0508(f)]

- n. Pursuant to 40 CFR 63.7550(b), the Permittee shall submit compliance reports to the DAQ on an annual basis. The Permittee shall submit the compliance report postmarked on or before January 30 of each calendar year for the preceding 12-month period. The first report shall be postmarked on or before January 30, 2017.
 - i. This report must also be submitted electronically through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due the report the Permittee submit the report to the at the appropriate address listed in 40 CFR 63.13. [40 CFR 63.7550(h)(3)]
 - o. The compliance report must contain the following information:
 - i. Company name and address;
 - ii. Process unit information, emissions limitations, and operating parameter limitations;
 - iii. Date of report and beginning and ending dates of the reporting period;
 - iv. The total operating time during the reporting period;
 - iv. If there are no deviations from the requirements of the work practice requirements in condition g. above, a statement that there were no deviations from the work practice standards during the reporting period; and
 - v. Include the date of the most recent tune-up for each unit required according to condition g. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown.
- [40 CFR 63.7550(a) and (c), Table 9]
- p. If the Permittee has a deviation from a work practice standard during the reporting period, the report must contain the following information:
 - i. A description of the deviation and which emission limit or operating limit from which the Permittee deviated; and
 - ii. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.
- [40 CFR 63.7550(a) and (d), 63.7540(b), Table 9]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in conditions n. through p. are not met.

E. The following Particleboard Mill operations:

Table 2.1.E.1

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Particleboard Mill Combustion Sources and Dryers			
1430	Surface layer triple pass, rotary drum (#3) dryer with one wood suspension dust/natural gas-fired burner (60 million Btu per hour maximum rated heat input)	CD-1431	High efficiency multi-cyclone with 2 tubes, each 132 inches in diameter
		CD-PB-WESP	Wet electrostatic precipitator
		CD-PB-PGT	Packed bed scrubber with photochemical gas treatment
1420	Core layer single pass, rotary drum (#1) dryer with one wood suspension dust/natural gas-fired burner (50 million Btu per hour maximum rated heat input)	CD-1421	High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter
		CD-PB-WESP	Wet electrostatic precipitator
		CD-PB-PGT	Packed bed scrubber with photochemical gas treatment
1410	Core layer single pass, rotary drum (#2) dryer with one wood suspension dust/natural gas-fired burner (50 million Btu per hour maximum rated heat input)	CD-1411	High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter
		CD-PB-WESP	Wet electrostatic precipitator
		CD-PB-PGT	Packed bed scrubber with photochemical gas treatment
3201	<u>Operating Scenario 1</u> One "Wellons" unit operating as a: a) wood suspension dust -fired burner (40 million Btu per hour maximum rated heat input); or a b) natural gas-fired burner (21.8 million Btu per hour maximum rated heat input); exhausting to either surface layer triple pass, rotary drum (#3) dryer [ID No. 1430] and/or core layer single pass, rotary drum (#1) dryer [ID No. 1420] and/or core layer single pass, rotary drum (#2) dryer [ID No. 1410]	CD-1431 AND/OR CD-1421 AND/OR CD-1411, AND CD-PB-WESP CD-PB-PGT	High efficiency multi-cyclone with 2 tubes, each 132 inches in diameter High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter Wet electrostatic precipitator Packed bed scrubber with photochemical gas treatment
3201	<u>Operating Scenario 2</u> One "Wellons" unit operating as a: c) natural gas -fired indirect heat exchanger (21.8 million Btu per hour maximum rated heat input)	NA	NA

Table 2.1.E.2

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Particleboard Mill Other Operations			
3501	Sawdust Rock and Metal Separator	CD-SC	High efficiency cyclone - 72 inches in diameter
		CD-3501	Reverse flow bag filter with 2,410 square feet of surface area
3515	Surface Material Transport (SL fines from screening operation)	CD-3500, CD-3525	Simple cyclone - 72 inches in diameter Reverse flow fabric filter with 6,918 square feet of surface area
		CD-3512B, CD-3515	in parallel with Simple cyclone - 72 inches in diameter Reverse flow fabric filter with 5,767 square feet of surface area
3525	Surface Formers and Mat Dumps	CD-3520A, CD-3520B, CD-3521	Three (3) simple cyclones - each 96 inches in diameter
		CD-3525	Reverse flow fabric filter with 6,918 square feet of surface area
3535	Flying Cut Off Saw, Pretrim Saws, & Production Collection	CD-3530 CD-3531 CD-3533 CD-3535	Simple cyclone - 84 inches in diameter Simple cyclone - 108 inches in diameter Simple cyclone - 108 inches in diameter Reverse flow fabric filter with 6,918 square feet of filter area
3545	Particleboard Mill Steinemann Finishing Sander	CD-2006, CD-3570, CD-3575	Reverse flow bag filter with 6,918 square feet of surface area in series with High efficiency cyclone - 144 inches in diameter in series with Reverse flow bag filter with 1,159 square feet of surface area
DEF- 2010	Particleboard Press	CD-PB-PGT	Packed bed scrubber with photochemical gas treatment
PB-BC	Particleboard Cooler	None	None
3565	Particleboard Mill Steinemann Calibrating Sander	CD-5001, CD-3570, CD-3575	Reverse flow fabric filter with 6,918 square feet of surface area in series with High efficiency cyclone - 144 inches in diameter in series with Reverse flow bag filter with 1,159 square feet of surface area
3555	Schelling Saw Board Trim	CD-3522, CD-4005	High efficiency cyclone - 120 inches in diameter Reverse flow bag filter with 6,918 square feet of surface area
3575	Sander Filter Transport for Filters 3545 & 3565	CD-3570, CD-3575	High efficiency cyclone - 144 inches in diameter Reverse flow bag filter with 1,159 square feet of surface area
3585	PZKR Green Chip Flakers	CD-3585	Reverse flow bag filter with 4,880 square feet of surface area
3595	Oversize Material Pallmann Mill	CD-3595	Reverse flow bagfilter (Maximum air-to-cloth ratio of 3.0 ACFM/total filter surface area).
3577	Dry waste transport system	CD-3532,	Simple cyclone - 60 inches in diameter
		CD-3577	Reverse flow bag filter with 4,068 square feet of surface area

The following table provides a summary of limits and/or standards for the particleboard mill.

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	0.30 lb/million Btu (ID No. 3201) (OS-2 only)	15A NCAC 02D .0503
PM	adequate duct work and properly designed collectors Affected facilities: Sources listed in Table 2.1 E.2	15A NCAC 02D .0512
PM	$E = 4.10P^{0.67}$ when $P < 30$ tons per hour Or $E = 55.0P^{0.11}$ when $P \geq 30$ tons per hour where E = allowable emission rate in pounds per hour P = process weight in tons per hour Affected facilities: Sources listed in Table 2.1.E.1 except (ID No. 3201) during OS-2	15A NCAC 02D .0515
Sulfur dioxide*	2.3 pounds per million Btu heat input Affected facilities: Sources listed in Table 2.1.E.1	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
PM ₁₀ Carbon monoxide VOCs Nitrogen dioxide Visible emissions	See Section 2.1 E.6.	15A NCAC 02D .0530
PM, PM ₁₀ , VOC	Compliance Assurance Monitoring	15A NCAC 02D .0614 [40 CFR 64]
HAPs	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (ID No. 3201) (OS-2 only)	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDDD)
HAPs	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products See Section 2.2 A.1	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDD)
Odors	<u>State Enforceable Only</u> See Section 2.2 A.2	15A NCAC 02D .1806

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the Wellons (**ID No 3201, when operating in OS-2 only**) that are discharged from this source into the atmosphere shall not exceed 0.33 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in this source.

2. 15A NCAC 02D .0512: PARTICULATES FROM WOOD PRODUCTS FINISHING PLANTS

- a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- b. Particulate matter emissions from the sources in Table 2.1.E.2 shall be controlled as presented in Table 2.1.E.2.
- i. No monitoring, recordkeeping or reporting shall be required for the particulate matter emissions from the particleboard press (**ID No. DEF-2010**) and particleboard cooler (ID No. PB-BC).
- c. To ensure compliance, the Permittee shall perform inspections and as follows:
- i. monthly external inspection of the duct work and cyclones, noting the structural integrity; and
- ii. internal inspection of the bag filters, every 12 months, noting the structural integrity and the condition of the filters.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the ductwork, cyclones, and bag filters are not inspected and maintained.

- d. The results of inspection and maintenance for the cyclones, and bag filters shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
- ii. the results of each inspection; and
- iii. the results of maintenance performed on any control device.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the control devices in Table E.2 within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the emission sources in Table 2.1.E.1 that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equations:

Process Rate	Allowable Emission Rate Equation
Less than or equal to 30 tons per hour	$E = 4.10 \times P^{0.67}$
Greater than 30 tons per hour	$E = 55.0(P)^{0.11} - 40$

Where E = allowable emission rate in pounds per hour
 P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of the test performed exceed the limits given in condition a. above for particulate matter, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from the emission sources in Table 2.1.E.1. shall be controlled as presented in Table 2.1.E.1
- d. The monitoring, recordkeeping, and reporting requirements required in 2.1 E.6.d.ii., f., h., j., l., m., and n. shall be followed in order to demonstrate compliance with 15A NCAC 02D .0515.

4. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Sulfur dioxide from the emission sources in Table 2.1.E.1 shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, record keeping, or reporting is required for sulfur dioxide emissions from then sources in Table 2.1.E.1.

5. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the emission sources in Table 2.1E.1 and 2.1E.2 shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of the test performed exceed the limits given in condition a. above for visible emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, the Permittee shall observe, on a weekly basis, the following emission points in the Particleboard mill for any visible emissions above normal:

Emission Source Description and ID No.	Emission Point ID No.
Sawdust Rock and Metal Separator (ID No. 3501)	CD-3501
Surface Layer Dryer (ID No. 1430)	CD-PB-PGT
Core Layer Dryer #1 (ID No. 1420)	
Core Layer Dryer #2 (ID No. 1410)	
"Wellons" Burner (ID No. 3201) (OS-1 only)*	
Particleboard Press (ID No. DEF-2010)	CD-PB-PGT
Surface Material Transport (ID No. 3515)	CD-3515 and CD-3525
Surface Formers and Mat Dumps (ID No. 3525)	CD-3525
Flying Cut Off Saw, Pretrim Saws, and Production Collection (ID No. 3535)	CD-3535
Board Cooler (ID No. PB-BC)	PB-BC
Particleboard Mill Steinemann Calibrating Sander (ID No. 3565)	CD-3575
Particleboard Mill Steinemann Finishing Sander (ID No. 3545)	CD-3575 and CD-2006
Schelling Saw Board Trim (ID No. 3555)	CD-4005
Sander Filter Transport for Filters 3545 and 3565(ID No. 3575)	CD-3575
PZKR Green Chip Flakers (ID No. 3585)	CD-3585
Oversized Material Pallmann Mill (ID No. 3595)	CD-3595
Dry Waste Transport System (ID No. 3577)	CD-3577

* **No observations are required for the Wellons burner (ID No. 3201) when operating in OS-2.**

The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:

- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
- demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in condition a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

- d. The results of the monitoring for visible emissions shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. To ensure quality, entries in the logbook should be signed by personnel responsible for the effective operation of the units in the particleboard mill and their air pollution control devices. The logbook shall record the following:
- the date and time of each recorded action;
 - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. For PSD purposes, the following "Best Available Control Technology" (BACT) permit limitations shall not be exceeded for units in the particleboard mill (**ID No. PB**):

Emission Source	Pollutants	Emission Limits^{*,***}	Control Technology
Sawdust Rock and Metal Separator (ID No. 3501)	PM ₁₀	0.02 lbs/hr	cyclone and baghouse
	VOC	5.56 lbs/hr, as C	none
	Opacity	20 percent	cyclone and baghouse
Surface Layer Dryer (ID No. 1430)	PM ₁₀	28.3 lbs/hr **	good combustion control with existing multiclones and wet ESP
Core Layer Dryer # 1 (ID No. 1420)	VOC	163.3 lbs/hr, as C **	good combustion control with existing wet ESP
Core Layer Dryer #2 (ID No. 1410)	CO	329.4 lbs/hr **	good combustion control
	NO _x	94.7 lbs/hr **	good combustion control
Surface Material Transport (ID No. 3515)	PM ₁₀	0.02 lbs/hr	cyclones and baghouse
	VOC	46.5 lbs/hr, as C	none
	Opacity	20 percent	cyclones and baghouse
Surface Formers and Mat Dumps (ID No. 3525)	PM ₁₀	0.06 lbs/hr	cyclones and baghouse
	VOC	1.95 lbs/hr, as C	none
	Opacity	20 percent	cyclones and baghouse
Flying Cut Off Saw, Pretrim Saws, and Production Collection (ID No. 3535)	PM ₁₀	0.005 lbs/hr	cyclones and baghouse
	VOC	1.77 lbs/hr, as C	none
	Opacity	20 percent	cyclones and baghouse
Particleboard Press (ID No. DEF-2010) and Board Cooler (ID No. PB-BC)	PM ₁₀	3.29 lbs/hour	none
	VOC	32.1 lbs/hour as C	none
	Opacity	20 percent	none
Particleboard Steinemann Calibrating Sander (ID No. 3565)	PM ₁₀	0.02 lbs/hour	cyclone and baghouses
	VOC	1.08 lbs/hour as C	none
	Opacity	20 percent	cyclone and baghouses
Particleboard Steinemann Finishing Sander (ID No. 3545)	PM ₁₀	1.2 lbs/hour	cyclone and baghouses
	VOC	0.35 lbs/hour as C	none
	Opacity	20 percent	cyclone and baghouses
Schelling Saw Board Trim (ID No. 3522)	PM ₁₀	0.01 lbs/hour	cyclone and baghouse
	VOC	0.72 lbs/hour as C	none
	Opacity	20 percent	cyclone and baghouse
Sander Filter Transport for Filters 3545 and 3565 (ID No. 3575)	PM ₁₀	4.0 lbs/hour	cyclone and baghouse
	VOC	1.77 lbs/hour as C	none
	Opacity	20 percent	cyclone and baghouse
PZKR Green Chip Flakers (ID No. 3585)	PM ₁₀	1.0 lbs/hour	baghouse
	VOC	0.64 lbs/hour as C	none
	Opacity	20 percent	baghouse
Oversized Material Pallmann Mill (ID No. 3595)	PM ₁₀	0.005 lbs/hour	baghouse
	VOC	1.77 lbs/hour as C	none
	Opacity	20 percent	baghouse
Dry Waste Transport System (ID No. 3577)	PM ₁₀	0.005 lbs/hour	cyclone and baghouse
	VOC	1.77 lbs/hour as C	none
	Opacity	20 percent	cyclone and baghouse

* BACT limits shall apply at all times. However, emissions resulting from startup, shutdown or malfunction as defined under 15A NCAC 02D .0535, exceeding the limits in condition a. above are permitted, provided that the Permittee, to the extent practicable, maintains and operates each emission source including any associated air pollution control equipment listed in this Table, in a manner consistent with good air pollution control practice for minimizing emissions.

** BACT emission limits are a total for three particleboard dryers (ID Nos. 1410, 1420, and 1430).

*** All BACT limits were established prior to the installation of the scrubber (ID No. CD-PB-PGT).

Testing (PM₁₀, VOC, CO, NO_x) [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required for visible emissions, PM₁₀, VOC, CO and NO_x, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limits given in Section 2.1 E.6.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limits in condition a. above by testing the particleboard dryers (**ID Nos. 1410, 1420, and 1430**) for PM₁₀, VOC, CO and NO_x in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ of the permit. Testing shall be completed and the results submitted within 90 days of start-up of particleboard dryer (**ID No. 1410**). All three dryers shall be in operation during this source testing.

If the results of the tests are above any of the limits in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring (PM₁₀) [15A NCAC 02Q .0508(f)]

- d. PM₁₀ emissions from the units in the particleboard mill (**ID No. PB**) shall be controlled as follows:
 - i. In the sawdust rock and metal separator (**ID No. 3501**), raw materials shall be sorted to remove unusable material and transported through a high efficiency cyclone (**ID No. SC**), which is 72 inches in diameter. Emissions from the cyclone shall be exhausted to a fabric filter (**ID No. CD-3501**) with 2,410 square feet of filter surface area.
 - ii. Emissions from the sources in in Table 2.1.E.1. shall be controlled as presented in Table 2.1.E.1
 - iii. Emissions from the sources in in Table 2.1.E.2. shall be controlled as presented in Table 2.1.E.2

Cyclones, multicyclones and fabric filters in Tables 2.1.E.1 and 2.1.E.2

- e. To ensure compliance and effective operation, the Permittee shall perform inspections and maintenance, as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a monthly visual external inspection of the control devices, system ductwork, and the material collection units for leaks.
 - ii. for each bagfilter, an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the requirements in condition e. are not met.

Wet electrostatic precipitator (ID No. CD-PB-WESP)

- f. To ensure compliance and the effective operation of the wet electrostatic precipitator (**ID No. CD-PB-WESP**), the Permittee shall:
 - i. operate the wet electrostatic precipitator with a minimum of two of the possible three fields, excluding periods when one of the two fields is in a wash cycle;
 - ii. monitor and record the secondary voltage and current through the precipitator. The lower limits (3-hour block averages) are given below:

Table 2.1.E.6.f.

Field No.	Minimum Secondary Voltage, kilovolts	Minimum Current, milliamps
1	23	48
2	25	75
3	27	127

- iii. The Permittee shall maintain a minimum water injection rate to the wet electrostatic precipitator of 7.8 gallons per minute (gpm, 3-hour block average).
- iv. If the Permittee reevaluates compliance with the emission limit in condition a. at parameter ranges outside of those in Table 2.1.E.6.f., the Permittee shall, upon approval by the DAQ, attach the approval memo containing the revised operating parameters to this permit and maintain the parameters in the associated operating ranges contained therein.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if:

- i. the voltage or current readings are not monitored or recorded, excluding periods of start-up, shut-down, malfunction, and monitor downtime; and as provided in i. and ii. above;
- ii. the voltage or current fall below the lower limits as established above in condition f.ii.; or
- iii. the water injection rate falls below 7.8 gpm (3-hour block average)

Monitoring (CO, VOC and NOx) [15A NCAC 02Q .0508(f)]

- g. To ensure compliance and effective operation, the Permittee shall perform inspections and maintenance of the particleboard dryers (**ID Nos. 1410, 1420, and 1430**). At a minimum, the inspection and maintenance requirement shall include the following:

- i. a weekly inspection of burners, fans, blowers, and associated process control equipment.
- ii. an annual (for each 12-month period following the initial inspection) internal inspection of the particleboard dryers (**ID Nos. 1410, 1420, and 1430**) for structural integrity.

If the required in condition g. are not met, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping (VE) [15A NCAC 02Q .0508(f)]

- h. The monitoring/recordkeeping requirements in Section 2.1 E.5.c. and d. shall be sufficient to ensure compliance with 15A NCAC 02D .0530. If the requirements of Section 2.1 E.5.c. and d. are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Recordkeeping (PM₁₀) [15A NCAC 02Q .0508(f)]

For the cyclones, multicyclones and fabric filters and WESP in Tables 2.1.E.1 and 2.1.E.2

- i. The results of inspection and maintenance activities shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative of DAQ upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

Recordkeeping (CO, VOC and NOx) [15A NCAC 02Q .0508(f)]

- j. The results of inspection and maintenance of the particleboard dryers (**ID Nos. 1410, 1420, and 1430**) shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative of DAQ upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the particleboard dryers; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

Monitoring/Recordkeeping (PM₁₀, CO, VOC, NO_x, and VE) [15A NCAC 02Q .0508(f)]

- k. The total particleboard production at the Particleboard Mill (**ID No. PB**) during any consecutive 12-month period shall not exceed **180,000,000 square feet on a ¾-inch basis**. The Permittee shall maintain monthly records of the total amount of particleboard produced in a logbook (written or in electronic format). Such records shall indicate the amount of particleboard produced during the preceding month and the total amount of particleboard produced over the preceding 12-month period.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the requirements in condition k. are not met.
- l. The operating hours for particleboard dryers (**ID Nos. 1410, 1420 and 1430**) shall not exceed 8,500 hours each during any consecutive 12-month period. The Permittee shall keep monthly records of the hours of operation for each particleboard dryer. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the requirements in condition l. are not met.

Reporting (PM₁₀, CO, VOC, and NO_x) [15A NCAC 02Q .0508(f)]

PM₁₀, CO, VOC, and NO_x

- m. The Permittee shall submit the results of any maintenance performed on the control devices in Tables 2.1.E.1 and 2.1.E.2 and/or particleboard dryers (**ID Nos. 1410, 1420, and 1430**) within 30 days of a written request by the DAQ.
- n. The Permittee shall submit a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

VE

- o. Reporting requirements in Section 2.1 E.5.e. shall be sufficient to ensure compliance with 15A NCAC 02D .0530.

PM₁₀, CO, VOC, NO_x, VE

- p. By January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June, the following shall be reported to the Regional Supervisor, Division of Air Quality:
 - i. the annual production rate at the Particleboard Mill (ID No. PB) in square feet on a ¾-inch basis. The annual production rate must be calculated for each of the six twelve-month periods over the previous seventeen months.
 - ii. the hours of operation for each particleboard dryer (**ID Nos. 1410, 1420 and 1430**) for each of the six twelve-month periods over the previous seventeen months.
 All instances of deviations from the requirements of this permit must be clearly identified.

7. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING [40 CFR 64]

- a. Pursuant to 40 CFR 64 and 15A NCAC 02D .0614, the Permittee shall comply with the conditions below for the Pollutant Specific Emission Unit(s) controlled by the wet electrostatic precipitator (ID No. CD-PB-WESP).

Emission Limitations/Standards

- b. The following table presents the regulated pollutants and the associated emission limitations/standards:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM PM ₁₀	See condition 2.1.E.1 See condition 2.1.E.6	15A NCAC 02D .0515 15A NCAC 02D .0530
VOCs	See condition 2.1.E.6	15A NCAC 02D .0530

Monitoring Approach [15A NCAC 02Q .0508(f), 40 CFR 64.6]

- c. The key elements of the monitoring approach for PM and PM₁₀, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

Monitoring Elements	Indicator No. 1	Indicator No. 2
Measurement Approach [64.6(c)(1)(i), (ii)]	Secondary voltage readings on each of the three fields are made on each field of the wet ESP every 15 minutes	Current readings on each of the three fields are made on each field of the wet ESP every 15 minutes
Indicator Range [64.6(c)(2)]	An excursion is defined as a one-hour block average voltage reading in any field lower than the respective 3-hour block average reading listed in Table 2.1.E.6.f. of this permit. Excursions trigger an inspection and corrective action.	An excursion is defined as a one-hour block average current reading in any field lower than the respective 3-hour block average reading listed in Table 2.1.E.6.f. of this permit. Excursions trigger an inspection and corrective action.
QIP threshold [64.8]	The QIP threshold is six excursions in a six-month reporting period.	The QIP threshold is six excursions in a six-month reporting period.
Data Representativeness [64.6(c)(1)(iii), 64.3(b)(1)]	Measurements are made once every 15 minutes and complied into the appropriate averaging periods.	Measurements are made once every 15 minutes and complied into the appropriate averaging periods.
Verification of Operational Status [64.3(b)(2)]	Monitoring shall be required upon issuance of permit no. 03449T46	
QA/QC Practices and Criteria [64.3(b)(3)]	Voltmeter calibration shall be performed according to manufacturer recommendations.	Ammeter calibration shall be performed according to manufacturer recommendations.
Monitoring frequency [64.3(b)(4)]	Measurements are made by a computerized data acquisition and handling system once every 15 minutes and complied into the appropriate averaging periods.	
Data collection procedure [64.3(b)(4)]	Non-SSM periods when voltage and current falls below the acceptable ranges for more than one -hour will be documented. An electronic or written logbook will be kept of all control device inspections and corrective actions	

Monitoring Approach [15A NCAC 02Q .0508(f), 40 CFR 64.6]

- d. The key elements of the monitoring approach for VOC, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

Monitoring Elements	Indicator
Measurement Approach [64.6(c)(1)(i), (ii)]	Liquid flow readings to the WESP are made once every 15-minutes
Indicator Range [64.6(c)(2)]	An excursion is defined as a one-hour block average flow reading lower than 3-hour block average reading listed in section 2.1.E.6.f.iii of this permit. Excursions trigger an inspection and corrective action.
QIP threshold [64.8]	The QIP threshold is six excursions in a six-month reporting period.
Data Representativeness [64.6(c)(1)(iii), 64.3(b)(1)]	Measurements are made once every 15 minutes and complied into the appropriate averaging periods.
Verification of Operational Status [64.3(b)(2)]	Monitoring shall be required upon issuance of permit No. 03449T45
QA/QC Practices and Criteria [64.3(b)(3)]	Flowmeter calibration shall be performed according to manufacturer recommendations.

Monitoring Elements	Indicator
Monitoring frequency [64.3(b)(4)]	Measurements are made by a computerized data acquisition and handling system once every 15 minutes and complied into the appropriate averaging periods.
Data collection procedure [64.3(b)(4)]	Non-SSM periods when voltage and current falls below the acceptable ranges for more than one -hour will be documented. An electronic or written logbook will be kept of all control device inspections and corrective actions

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 64.9]

- e. The owner or operator shall maintain records of the following:
- Date and time and results of all monitoring activities;
 - Information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - Maintenance records of the differential pressure gauge; and
 - Written QIP required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan

Reporting Requirements [15A NCAC 02Q .0508(f), 40 CFR 64.9]

- f. The Permittee shall submit a summary report of all monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations for the requirements of this permit must be clearly identified. At a minimum, the report shall include the following elements:
- Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

8. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485]

- a. For this existing process heater designed to burn gas 1 fuels (**ID No. 3201**), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63 Subpart DDDDD. "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."
- i. Condition 2.1.E.8 applies only when the Permittee operates the Wellons (**ID No. 3201**) in operating scenario 2 (OS-2).

Definitions and Nomenclature [40 CFR 63.7575]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.7565]

- c. The Permittee shall comply with the requirements of 40 CFR Part 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63 Subpart DDDDD.

Compliance Date [40 CFR 63.7495(b)]

- d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than January 31, 2016. [40 CFR 63.7495(b), 63.7510(e)]

- i. If the Wellons (**ID No. 3201**) is not operated in OS-2 prior to January 1, 2016, the Permittee shall complete the initial tune up no later than 30 days after startup. [40 CFR 63.7510(j)]

Notifications [40 CFR 63.7545, 63.7530(d),(e),(f)]

- e. The Permittee shall submit a Notification of Compliance Status. The notification shall contain the following:

- i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.

- ii. the following certification(s) of compliance, as applicable:

- i.- "This facility complies with the required initial tune-up according to the procedures in condition g.i. through g.v. and m. ii." (40 CFR 63.7540(a)(10)(i) through (vi)); and

- ii.- "This facility has had an energy assessment performed according to condition k. (40 CFR 63.7530(e))."

The notification must be signed by a responsible official and sent before the close of business on the 60th day following the completion of the initial tune up and one time energy assessment (whichever is later).

General Compliance Requirements [40 CFR 63.7505(a), 63.7500(f)]

- f. The Permittee shall be in compliance with the work practice standards in this subpart. These standards apply at all times the affected unit is operating.

Work Practice Standards [15A NCAC 02Q .0508(f)]

- g. The Permittee shall conduct a tune-up of the process heater annually as specified below.

- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled unscheduled unit shutdown;
 - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown)
 - iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject.
 - v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[40CFR 63.7500(a), 63.7540(a)(10)]

- h. Each annual tune-up shall be conducted no more than 13 months after the previous tune-up. [40CFR 63.7515(d)]
- i. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[40 CFR 63.7540(a)(13), 63.7515(g)]

- j. At all times, the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.7500(a)(3)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in f. through j. are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(b)]

- k. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must include the following items:
 - i. A visual inspection of the boiler system;
 - ii. An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints;
 - iii. An inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator;
 - iv. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;
 - v. A list of major energy conservation measures that are within the facility's control;
 - vi. A list of the energy savings potential of the energy conservation measures identified; and
 - vii. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
- l. The energy assessment will be 8 on-site technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site (excluding MDF plant) energy use system(s) accounting for at least 50 percent of the affected boiler(s) energy (e.g., steam, hot water, process heat, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities, within the limit of performing an 8-hour on-site energy assessment.
[40 CFR 63.7500(a)(1), Table 3]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in k. through l. are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

- m. The Permittee shall keep the following:
 - i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
[40 CFR 63.7555(a)(1)]
 - ii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
 - (A) The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the source;
 - (B) A description of any corrective actions taken as a part of the combustion adjustment; and
 - (C) The type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
[40 CFR 63.7540(a)(10)(vi)]
 - iii. The associated records for conditions f. through l. including the occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment.
[40 CFR 63.10(b)(2)(ii)]
 - iv. maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.
[40 CFR 63.7555(i)]
 - v. maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.
[40 CFR 63.7555(j)]
- n. The Permittee shall:
 - i. maintain records in a form suitable and readily available for expeditious review;
 - ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
 - iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.
[40 CFR 63.7560, 63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained per conditions m. through n.

Reporting Requirements [15A NCAC 02Q .0508(f)]

- o. In lieu of a 1-year reporting requirement pursuant to 40 CFR 63.7550(b), the Permittee has elected to submit compliance reports to the DAQ on a semi-annual basis. The Permittee shall submit the compliance report postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June.
 - i. The first report shall cover the period beginning on January 31, 2016 and shall be postmarked on or before July 30, 2016.
 - ii. These reports must also be submitted electronically through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due the report the Permittee submit the report to the at the appropriate address listed in 40 CFR 63.13. [40 CFR 63.7550(h)(3)]
 - A. The Permittee may submit the CDX report in condition o.ii. above on a 1-year basis as allowed pursuant to 40 CFR 63.7550(b).
- p. The compliance report must contain the following information:
 - i. Company name and address;
 - ii. Process unit information, emissions limitations, and operating parameter limitations;
 - iii. Date of report and beginning and ending dates of the reporting period;
 - iv. The total operating time during the reporting period;
 - iv. If there are no deviations from the requirements of the work practice requirements in condition g. above, a statement that there were no deviations from the work practice standards during the reporting period; and
 - v. Include the date of the most recent tune-up for each unit required to conduct an annual tune-up according to condition g. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.[40 CFR 63.7550(a) and (c), Table 9]
- q. If there is a deviation from a work practice standard during the reporting period, the report must contain the following information:
 - i. A description of the deviation and which emission limit or operating limit from which the Permittee deviated; and
 - ii. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.[40 CFR 63.7550(a) and (d), 63.7540(b), Table 9]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in o. through q. are not met.

F. Laminating Mill:

Table 2.1.F

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
3593 and 3594	Two (2) Short Cycle Laminating Presses	CD-3593	Reverse flow bagfilter (Maximum air-to-cloth ratio of 4.1 ACFM/total filter surface area).
Pr-Heat1	Natural gas-fired hot oil heater (4.7 million Btu per hour heat input) used with short cycle laminating presses	N/A	NA

The following table provides a summary of limits and/or standards for the material handling sources.

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	<u>Affected source: (ID No. Pr-Heat1)</u> 0.60 pounds per million Btu heat input	15A NCAC 02D .0503
	<u>Affected source: (ID Nos. 3593 and 3594)</u> $E = 4.10P^{0.67}$ where; E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Sulfur dioxide	<u>Affected source: (ID No. Pr-Heat1)</u> 2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
HAPs	<u>Affected source: (ID No. Pr-Heat1)</u> Best Combustion Practices	15A NCAC 02D .1109
Odors	<u>State-Enforceable Only</u> See Section 2.2 A.2	15A NCAC 02D .1806

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- Emissions of particulate matter from the combustion of natural gas from the hot oil heater (ID No. Pr-Heat1) into the atmosphere shall not exceed 0.60 pounds per million Btu heat input.

Testing [15A NCAC 02D .0508(f)]

- If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- No monitoring, record keeping, or reporting is required for particulate emissions from the firing of No. 2 fuel oil and natural gas in the hot oil heater (ID No. Pr-Heat1).

2. 15A NCAC 02D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- Emissions of particulate matter from the units in the short cycle laminating presses (ID Nos. 3593 and 3594) that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equations:

Process Rate	Allowable Emission Rate Equation
Less than or equal to 30 tons per hour	$E = 4.10 \times P^{0.67}$
Greater than 30 tons per hour	$E = 55.0(P)^{0.11} - 40$

Where

E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of the test performed exceed the limits given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from the short cycle laminating presses (**ID Nos. 3593 and 3594**) shall be controlled using the reverse flow bagfilter (**ID No. CD-3593**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
 - ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection; and
 - iii. the results of maintenance performed on any control device.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the bagfilter (**ID No. CD-3593**) within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Sulfur dioxide emissions from the hot oil heater (**ID No. Pr-Heat1**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. No monitoring, record keeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in the hot oil heater (**ID No. Pr-Heat1**).

4. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the sources listed in Table 2.1.F. shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of the test performed exceed the limits given in condition a. (above) for visible emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, the Permittee shall observe, on a weekly basis, the following emission points in the Particleboard mill for any visible emissions above normal:

Emission Source	Emission Point ID No.
short cycle laminating presses (ID Nos. 3593 and 3594)	CD-3593

The weekly observation must be made for each of the calendar year period to ensure compliance with this requirement. If visible emissions from the short cycle laminating presses are observed to be above normal, the Permittee shall either:

- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
- demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in condition a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

- d. The results of the monitoring for visible emissions shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. To ensure quality, entries in the logbook should be signed by personnel responsible for the effective operation of the units in the particleboard mill and their air pollution control devices. The logbook shall record the following:
- The date and time of each recorded action;
 - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 02D .1109: Case-by-Case MACT

- a. The Permittee shall use best combustion practices when operating the affected heater (**ID No. Pr-Heat1**). The initial compliance date for this work practice standard and the associated monitoring, recordkeeping, and reporting requirements is **October 18, 2013**. These conditions need not be included on the annual compliance certification until after the initial compliance date.
- i. The Permittee shall comply with this CAA §112(j) standard until **May 19, 2019**. The initial compliance date for the applicable CAA §112(d) standard for “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters” is **May 20, 2019**, as specified in Section 2.1.F.6. below.

Monitoring/Recordkeeping

- b. To ensure compliance, the Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
- Inspect the burner, and clean or replace any components of the burner as necessary;

- ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,
- iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the affected heater is not inspected and maintained as required above.

- c. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date of each recorded action;
 - ii. The results of each inspection; and,
 - iii. The results of any maintenance performed on the heater.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- d. No reporting is required.

6. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, .7490(d), .7499(l)]

- a. For the heater (**ID No. Pr-Heat1**) (an existing source designed to burn gas 1 fuels with a heat input capacity of less than or equal to 5 million Btu per hour), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63 Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."
 - i. The Permittee shall comply with the CAA §112(j) standard in Section 2.1.F.5. through **May 19, 2019**. The Permittee shall be subject to the requirements of this standard starting May 20, 2019. Note that the requirements of this standard may require action on behalf of the Permittee prior to May 20, 2019.

Definitions and Nomenclature [40 CFR 63.7575]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.7565]

- c. The Permittee shall comply with the requirements of 40 CFR Part 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63 Subpart DDDDD.

Compliance Date [40 CFR 63.7510(e), 63.56(b)]

- d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019.

Notifications [40 CFR 63.7545(e)(8), 63.7530(e),(f)]

- e. The Permittee shall submit a Notification of Compliance Status. The notification must be signed by a responsible official and sent before the close of business on the 60th day following the completion of the initial tune up and one time energy assessment (whichever is later). The notification shall contain the following:
 - i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.
 - ii. the following certification(s) of compliance, as applicable:
 - A.- "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63 Subpart DDDDD at the site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)" [i.e., conditions g.i. through g.v. and l. ii.]; and
 - B.- "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)" [i.e., condition k.] and is an accurate depiction of the facility at the time of the assessment.

General Compliance Requirements [40 CFR 63.7505(a), 63.7500(f)]

- f. The Permittee shall be in compliance with the work practice standards in this subpart. These standards apply at all times the affected unit is operating.

Work Practice Standards [15A NCAC 02Q .0508(f)]

- g. The Permittee shall conduct a tune-up of the process heater every five years as specified below.
- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but the burner must be inspected at least once every 72 months)
 - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown)
 - iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject.
 - v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
[40CFR 63.7500(a), (e), 63.7540(a)(10), (a)(12)]
- h. Each 5-year tune-up shall be conducted no more than 61 months after the previous tune-up. [40CFR 63.7515(d)]
- i. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13), 63.7515(g)]
- j. At all times, the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in f. through j. are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(f)]

- k. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR Part 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in §63.7575: [§63.7500(a)(1), Table 3]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in condition k. are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

- l. The Permittee shall keep the following:
- i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
[40 CFR 63.7555(a)(1)]
 - ii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
 - A. The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the source;
 - B. A description of any corrective actions taken as a part of the combustion adjustment; and

- C. The type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
[40 CFR 63.7540(a)(10)(vi)]
- iii. The associated records for conditions f. through l. including:
 - A. the occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment.
[40 CFR 63.10(b)(2)(ii)]
- iv. maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.
[40 CFR 63.7555(i)]
- v. maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.
[40 CFR 63.7555(j)]
- m. The Permittee shall:
 - i. maintain records in a form suitable and readily available for expeditious review;
 - ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
 - iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.
[40 CFR 63.7560, 63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in conditions l. through m.

Reporting Requirements [15A NCAC 02Q .0508(f)]

- n. The Permittee shall submit compliance reports to the DAQ on a 5-year basis. The first report shall cover the period beginning on the compliance date specified in condition d. and ending on the earliest December 31st following a complete 5-year period. Subsequent 5-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 31.
[40 CFR 63.7550(a), (b)]
 - i. This report must also be submitted electronically through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due the report the Permittee submit the report to the at the appropriate address listed in 40 CFR 63.13. [40 CFR 63.7550(h)(3)]
- o. The compliance report must contain the following information:
 - i. Company name and address;
 - ii. Process unit information, emissions limitations, and operating parameter limitations;
 - iii. Date of report and beginning and ending dates of the reporting period;
 - iv. The total operating time during the reporting period;
 - iv. If there are no deviations from the requirements of the work practice requirements in condition g. above, a statement that there were no deviations from the work practice standards during the reporting period; and
 - v. Include the date of the most recent tune-up for each unit required according to condition g. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown.
[40 CFR 63.7550(a) and (c), Table 9]
- p. If the Permittee has a deviation from a work practice standard during the reporting period, the report must contain the following information:
 - i. A description of the deviation and which emission limit or operating limit from which the Permittee deviated; and
 - ii. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.
[40 CFR 63.7550(a) and (d), 63.7540(b), Table 9]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in n. through p. are not met.

G. Reserved

H. Reserved

I. The following combustion source:

Table 2.1.I.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-21 MACT ZZZZ	Diesel Fuel -fired Emergency Generator (1592 Brake Horsepower output)	NA	NA

The following table provides a summary of limits and/or standards for the emission sources above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
HAPs	Maximum Achievable Control Technology	15A NCAC 02D .1111 (40 CFR Part 63 Subpart ZZZZ)
Odors	<u>State Enforceable Only</u> See Section 2.2 A.2.	15A NCAC 02D .1806
NO _x , PM _{2.5} , PM ₁₀	See Section 2.2 B.1.	15A NCAC 02Q .0317 (PSD Avoidance)
VOCs	Best Available Control Technology See Section 2.2 B.2.	15A NCAC 02D .0530
VOCs	Schedule of Compliance See Section 2.3	15A NCAC 02D .0530

1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of diesel fuel in this source.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the firing of diesel fuel in this source.

3. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 63.6590(a)(1)(i)]

- a. For this emission source (existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63 Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

Stationary RICE subject to limited requirements [40 CFR 63.6590(b)]

- b. Pursuant to 40 CFR 63.6590(b)(3)(iii), these sources do not have to meet the requirements of 40 CFR Part 63 Subpart ZZZZ and Subpart A, including initial notification requirements.

2.2 - Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-wide affected emission sources

The following table provides a summary of limits and standards applicable facility wide:

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAPs	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDD)
Odors	<u>State Enforceable Only</u> Odorous emissions must be controlled	15A NCAC 02D .1806

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

- a. For the emission sources subject to “MACT DDDD” as indicated in the permitted equipment list, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63 Subpart DDDD, “National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products” and Subpart A “General Provisions.”
 - i. The Permittee shall submit a permit application with the Notification of Compliance Status required in condition x. below to revise the permit to include monitoring parameters for the biofilter (**ID No. CD18**).

Definitions and Nomenclature [40 CFR 63.2292]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.2292 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.2290]

- c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources, as identified in Table 10 to 40 CFR Part 63 Subpart DDDD.

Operating Requirements [15A NCAC 02Q .0508(f)]

- d. For the emission sources subject to “MACT DDDD” as indicated in the permitted equipment list the Permittee shall comply with compliance options and operating requirements described in Tables 1A, 1B, and 2 to 40 CFR Part 63 and in paragraph 40 CFR 63.2240 (c) by using one or more of the compliance options listed in paragraphs (a), (b), and (c) of 40 CFR 63.2240 for each process unit. [40 CFR 63.2240]
- e. The Permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i). [40 CFR 63.2250(b)]
- f. The Permittee must develop a written Startup, Shutdown, and Malfunction Plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3). [40 CFR 63.2250(c)]
- g. To the extent practical, startup and shutdown of emission control systems must be scheduled during times when process equipment is also shut down. [40 CFR 63.2251(e)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operating requirements in d. through g. are not met.

Work Practice Requirements [15A NCAC 02Q .0508(f)]

- h. The Permittee shall meet each work practice requirement per 40 CFR 63.2241, as applicable. [40 CFR 63.2241]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the work practice requirements in condition h. are not met.

Affected Sources Not Subject to Operating Requirements [40 CFR 63.2252]

- i. For process units not subject to the operating requirements in paragraph (d) through (g), The Permittee is not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSM plans, and recordkeeping or reporting requirements of this 40 CFR Part 63 Subpart DDDD, or any other

requirements in 40 CFR Part 63 Subpart A except for the initial notification requirements in 40 CFR 63.9(b).

Testing [15A NCAC 02D .2601]

- j. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limits given in paragraph d. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1112.

Initial Compliance requirements [15A NCAC 02D .2601, 40 CFR 63.2260 through 40 CFR 63.2269]

- k. To demonstrate initial compliance with the compliance options and operating requirements, the Permittee must conduct performance tests and establish each site-specific operating requirement in Table 2 to 40 CFR Part 63 Subpart DDDD according to the requirements in 40CFR 63.2262 and Table 4 to 40 CFR Part 63 Subpart DDDD. Combustion units that accept process exhausts into the flame zone are exempt from the initial performance testing and operating requirements for thermal oxidizers.
- l. The Permittee must demonstrate initial compliance with each compliance option, operating requirement, and work practice requirement that applies to the Permittee according to Tables 5 and 6 to 40 CFR Part 63 Subpart DDDD and according to 40 CFR 63.2260 through 40 CFR 63.2269.
- m. The Permittee shall conduct performance tests no later than 180 calendar days after initial startup or no later than 180 calendar days after the compliance date that is specified for the Permittee's source in 40 CFR 63.2233 and according to 40 CFR 63.7(a)(2), whichever is later.
- n. The Permittee shall conduct initial compliance demonstrations that do not require performance tests upon initial startup or no later than 30 calendar days after the compliance date that is specified for the Permittee's source in 40 CFR 63.2233, whichever is later. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the initial compliance requirements in conditions k. through n. are not met.

Monitoring and Continuous Compliance Requirements [15A NCAC 02Q .0508(f)]

- o. The Permittee shall monitor and collect data according to 40 CFR 63.2270.
- p. The Permittee shall demonstrate continuous compliance with the compliance options, operating requirements, and work practice requirements in 40CFR 63.2240 and 63.2241 that apply according to the methods specified in Tables 7 and 8 to 40 CFR Part 63 Subpart DDDD.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in conditions o. and p. are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.2282 and .2283]

- q. The Permittee must keep the records listed in 40 CFR 63.2282(a).
- r. The Permittee must keep the records required in Tables 7 and 8 to 40 CFR Part 63 Subpart DDDD to show continuous compliance with each compliance option, operating requirement, and work practice requirement that applies. [40CFR 63.2282(b)]
- s. The Permittee must maintain records in a form suitable and readily available for expeditious review as specified in 40 CFR 63.10(b)(1). [40 CFR 63.2283(a)]
- t. As specified in 40 CFR 63.10(b)(1), the Permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.2283(b)]
- u. The Permittee must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to 40 CFR 63.10(b)(1). The Permittee can keep the records offsite for the remaining 3 years. [40 CFR 63.2283(c)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained per conditions q. through u.

Notification Requirements [40 CFR 63.2280]

- v. The Permittee must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9 (b) through (e), and (g) and (h) by the dates specified. [40 CFR 63.2280(a)]
- w. If the Permittee is required to conduct a performance test, the Permittee must submit a written notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as specified in §63.7(b)(1).
- x. If the Permittee is required to conduct a performance test, design evaluation, or other initial compliance demonstration as specified in Tables 4, 5, and 6 to 40 CFR Part 63 Subpart DDDD, the Permittee must submit a Notification of Compliance Status as specified in 40 CFR 63.9(h)(2)(ii).

- i. For each initial compliance demonstration required in Table 5 or 6 to 40 CFR Part 63 Subpart DDDD that does not include a performance test, the Permittee must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.
- ii. For each initial compliance demonstration required in Tables 5 and 6 to 40 CFR Part 63 Subpart DDDD that includes a performance test conducted according to the requirements in Table 4 to 40 CFR Part 63 Subpart DDDD, the Permittee must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR 63.10(d)(2).
- y. If the Permittee uses the emissions averaging compliance option in 40 CFR 63.2240(c), the Permittee must submit an Emissions Averaging Plan to the EPA Administrator for approval no later than 1 year before the compliance date or no later than 1 year before the date the Permittee would begin using an emissions average, whichever is later. The Emissions Averaging Plan must include the information in 40 CFR 63.2280(f).
- z. The Permittee must notify the EPA Administrator within 30 days before any of the following actions are taken: [40 CFR 63.2280(g)]
 - i. The modification or replacement the control system for any process unit subject to the compliance options and operating requirements in paragraph (d).
 - ii. The shut down of any process unit included in the Emissions Averaging Plan.
 - iii. The change in a continuous monitoring parameter or the value or range of values of a continuous monitoring parameter for any process unit or control device.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the notification requirements in conditions v. through z. are not met.

Reporting Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.2281]

- aa. The permittee shall submit a compliance report semiannually postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June [40 CFR 63.2281(b)(5)]
- bb. The compliance report must contain the information in 40 CFR 63.2281(c).
- cc. For each deviation from a compliance option or operating requirement and for each deviation from the work practice requirements in Table 8 to 40 CFR Part 63 Subpart DDDD that occurs at an affected source where the Permittee is not using a CMS to comply with the compliance options, operating requirements, or work practice requirements in this subpart, the compliance report must contain the information in 40 CFR 63.2281(c)(1) through (6) and (d)(1) and (2). This includes periods of startup, shutdown, and malfunction and routine control device maintenance. [40 CFR 63.2281(d)]
- dd. For each deviation from a compliance option or operating requirement occurring at an affected source where the Permittee is using a CMS to comply with the compliance options and operating requirements in 40 CFR Part 63 Subpart DDDD, the Permittee must include the information 40 CFR 63.2281(c)(1) through (6) and paragraphs (e)(1) through (11). This includes periods of startup, shutdown, and malfunction and routine control device maintenance. [40 CFR 63.2281(e)]
- ee. If the Permittee complies with the emissions averaging compliance option in 40 CFR 63.2240(c), the Permittee must include in the Permittee's semiannual compliance report calculations based on operating data from the semiannual reporting period that demonstrate that actual mass removal equals or exceeds the required mass removal. [40 CFR 63.2281(f)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in aa. through ee. are not met

STATE ENFORCEABLE ONLY

2. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

- a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

B. Medium Density Fiberboard Facilities

The following table provides a summary of the limits and/or standards for the MDF facilities:

Regulated Pollutant	Limits/Standards	Applicable Regulation
NO _x , PM _{2.5} , PM ₁₀	See Section 2.2 B.1.	15A NCAC 02Q .0317 (PSD Avoidance)
VOC	Best Available Control Technology	15A NCAC 02D .0530

1. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid the applicability of 15A NCAC 02D .0530, the combined emissions from the sources indicated in the permitted equipment list in Section 1 as the Medium Density Fiberboard Facilities (MDF sources) shall not exceed the following limits:
 - i. Nitrogen oxide emissions shall not exceed 177.8 tons per consecutive 12-month.
 - ii. PM-2.5 emissions shall not exceed 111.9 tons per consecutive 12-month period.
 - ii. PM-10 emissions shall not exceed 116.9 tons per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limits given in Section 2.2 B.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall test the biofilter (**ID No. CD18**) to establish emission factors to be used for purposes of conditions e. and f. below. Testing shall be completed within 180 days after the start-up of the biofilter (**ID No. CD18**). Testing shall be conducted in scenarios that represent worst-case emissions. The Permittee shall submit a written report of the test(s) results to the Regional Supervisor, DAQ within 60 days of completion of the test. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met.

Monitoring 15A NCAC 02Q .0508(f)]

- d. The Permittee shall maintain a minimum urea/water solution (45% urea concentration by volume) injection rate of 0.24 gpm (3-hour block average) (**ID No. CD02-A**). If the Permittee conducts source testing such that the NO_x emission factor listed in Table 2.2.B.1 was reevaluated at a different injection rate or urea concentration, the Permittee shall, upon approval by the DAQ, attach the approval memo containing the revised operating parameters to this permit and maintain the parameters in the associated operating ranges contained therein.
- e. The Permittee shall calculate on a monthly basis the monthly and rolling 12-month total for each of the nitrogen oxides, PM₁₀ and PM_{2.5} emissions from the MDF sources.
- f. For purposes of condition e. the Permittee shall utilize the following emission factors in Table 2.2.B.1 below. If the Permittee conducts source testing that results in any emission factors greater than those in Table 2.2.B.1, the Permittee shall, upon approval by the DAQ, attach the approval memo containing the revised emission factors to this permit and use those factors in place of the respective emission factors in Table 2.2.B.1.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the requirements in conditions d through f. are not met.

Recordkeeping 15A NCAC 02Q .0508(f)]

- g. The Permittee shall keep the following records in a logbook (written or electronic format):
 - i. the 3-hour block averages of the urea/water injection rate (**ID No. CD02-A**);
 - ii. the monthly and rolling 12-month total for each of the nitrogen oxides, PM₁₀ and PM_{2.5} emissions from the MDF sources; and
 - iii. the process rates of the dryers in ODMT/hr, the process rates of the press in MSF/hr; and the heat inputs for the combustion sources in MMBtu/hr. These values may be calculated on a monthly average basis.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met.

Table 2.2.B.1

Emission Point	Description	PM-10		PM-2.5		NOx	
		EF	Units	EF	Units	EF	Units
EP-01	Refiner Abort Cyclone	3.52	lb/hr	3.52	lb/hr	NA	
EP-03	Fiber Sifter System Filter	0.58	lb/hr	0.58	lb/hr	NA	
EP-04	Forming Line Clean-Up Filter	0.55	lb/hr	0.55	lb/hr	NA	
EP-05	Mat reject system Filter	0.48	lb/hr	0.48	lb/hr	NA	
EP-07	Saw System Filter	0.84	lb/hr	0.84	lb/hr	NA	
EP-08	Sander System No. 1 Exhaust Filter	0.90	lb/hr	0.9	lb/hr	NA	
EP-09	Recycled Fiber Silo No. 1 Filter	0.02	lb/hr	0.02	lb/hr	NA	
EP-10	Sander System No.2 Exhaust Filter	0.45	lb/hr	0.45	lb/hr	NA	
EP-12	Sander Dust Silo No. 1 Filter	0.02	lb/hr	0.02	lb/hr	NA	
EP-13	Dry Sawdust Silo Filter	0.02	lb/hr	0.02	lb/hr	NA	
EP-15	Recycled Fiber Silo No. 2 Filter	0.02	lb/hr	0.02	lb/hr	NA	
EP-17	Sander Dust Silo No. 2 Filter	0.02	lb/hr	0.02	lb/hr	NA	
EP-18/19/20	N.G. Combustion	7.45E-03	lb/MMBtu	7.45E-03	lb/MMBtu	0.098	lb/MMBtu
ES-02-A	Energy System Abort (50/50 dry/wet fuel)	0.5	lb/MMBtu	0.43	lb/MMBtu	0.33	lb/MMBtu
ES-02-A	Energy System Abort (dry fuel)	0.36	lb/MMBtu	0.31	lb/MMBtu	0.33	lb/MMBtu
EP-16	Press Scrubber	0.088	lb/MSF	0.088	lb/MSF	NA	
EP-02/14	Dryer scrubber (SW)	0.51	lb/ODMT	0.51	lb/ODMT	0.33	lb/MMBtu
EP-02/14	Dryer scrubber (SW/HW)	0.51	lb/ODMT	0.51	lb/ODMT	0.33	lb/MMBtu
EP-16	Press Scrubber (CDMDT)	0.088	lb/MSF	0.088	lb/MSF	NA	
EP-02/14	Dryer scrubber (SW)(CDMDT)	0.51	lb/ODMT	0.51	lb/ODMT	0.33	lb/MMBtu
EP-02/14	Dryer scrubber (SW/HW)(CDMDT)	0.51	lb/ODMT	0.51	lb/ODMT	0.33	lb/MMBtu

SW – softwood only processing

SW/HW – softwood and hardwood processing

CDMDT – Control Device Maintenance Downtime, MACT Subpart DDDD, CD02-2, CD14-2, CD16-2

Reporting [15A NCAC 02Q .0508 (f)]

- h. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
- i. a summary of the 3-hour block averages of the urea/water injection rate (**ID No CD02-A**); and
 - ii. the monthly and rolling 12-month total for each of the nitrogen oxides, PM10 and PM2.5 emissions from the MDF sources. The 12 month rolling totals shall be calculated for each of the previous 17 months.

2. 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. For PSD purposes, the following "Best Available Control Technology" (BACT) permit limitations shall not be exceeded for units in the MDF Facilities:

Table 2.2.B.2

Equipment/ Process	ID No.	Emission Limits*	Control Technology
MDF Facilities Operations			
Energy System	ES-02-A	2.88 lb WPP1** VOC/ODMT (24-hour average)	Biofilter (ID No. CD18)
Two Stage Boiler System with backup natural gas burners	ES-02-B ES-02-C ES-02-D	2.88 lb WPP1 VOC/ODMT (24-hour average)	
MDF Board Cooler and Press Hall	ES-06-B	2.88 lb WPP1 VOC/ODMT (24-hour average)	
MDF Press	ES-16	0.17 lb WPP1 VOC/MSF (24-hour average)	Biofilter (ID No. CD18)
MDF Woodworking Operations			
Fiber Sifter System	ES-03	0.082 lb WPP1 VOC//ODMT	None
Forming Line Clean-Up System	ES-04	0.082 lb WPP1 VOC//ODMT	
Mat Reject System	ES-05	0.082 lb WPP1 VOC//ODMT	
Saw System	ES-07	0.01 lb WPP1 VOC//MSF	
Sander System No. 1 (Primary sander)	ES-08	0.01 lb WPP1 VOC//MSF	
Sander System No. 2 (Finishing Sander)	ES-10	0.01 lb WPP1 VOC//MSF	
Recycled Fiber Silo No. 1	ES-09	0.082 lb WPP1 VOC//ODMT	
Recycled Fiber Silo No. 2	ES-15	0.082 lb WPP1 VOC//ODMT	
Sander Dust Silo No. 1	ES-12	0.268 lb WPP1 VOC//ODMT	
Sander Dust Silo No. 2	ES-17	0.268 lb WPP1 VOC//ODMT	
Dry Sawdust Silo Filter	ES-13	0.268 lb WPP1 VOC//ODMT	
Other Emission Sources in the MDF Plant			
Diesel Fuel-fired Emergency Generators	ES-21 I-DFP	Work practice standards and maintenance as required by 40 CFR 40 Part 63 Subpart ZZZZ and CFR 40 Part 60 Subpart IIII as applicable	None
Natural gas-fired hot oil heaters	ES-18, ES-19, ES-20	Proper design, maintenance, and operating practices	None
Gasoline storage tank Diesel storage tanks	I-Gas Not permitted	Proper design, maintenance, and operating practices	None

* BACT limits shall apply at all times. However, emissions resulting from startup, shutdown or malfunction as defined under 15A NCAC 02D .0535, exceeding the limits in condition a. above are permitted, provided that the Permittee, to the extent practicable, maintains and operates each emission source including any associated air pollution control equipment listed in this Table, in a manner consistent with good air pollution control practice for minimizing emissions.

** Wood Products Protocol 1 (WPP1) as provided in U.S. EPA, document entitled, "Interim VOC Measurement Protocol for the Wood Products Industry," July 2007.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limits given in Section 2.2 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limits in Section 2.2 B.1.a for the MDF facilities operations in Table 2.2 B.2. Testing of the biofilter (**ID No. CD18**) shall be conducted in accordance with the following:
 - i. The Permittee shall perform testing in accordance with 15A NCAC 02D .2600.
 - ii. The Permittee shall establish a minimum and maximum biofilter bed temperature during testing, using procedures specified in 40 CFR 63.2262(m).
 - iii. The energy system (**ID No. ES-02-A**), the two-stage dryer system (**ID No. ES-02-B**), and the MDF Press (**ID No. ES-16**) shall be in operation during source testing. The Permittee shall be responsible for ensuring, within the limits of practicality, that the equipment or processes being tested are operated at or near their maximum normal production rate or at a lesser rate if specified by the Director or his delegate.
 - iv. Testing shall be completed within 180 days of initial start-up of biofilter (**ID No. CD18**).
 - v. The Permittee shall submit a written report of the test(s) results to the Regional Supervisor, DAQ within 60 days of completion of the test.

If the results of the tests are above any of the limits in Section 2.2 B.1.a above or if the testing is not conducted in accordance with Section 2.2 B.1.c, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping Requirements [15A NCAC 02Q .0508(f)]

- d. The Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any, for the MDF woodworking operations cited in Table 2.2.B.2. The results of inspection and maintenance activities for the MDF woodworking operations shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the monthly throughput for each emission source in either ODMT or MSF, as appropriate.
 - ii. the results of any maintenance activities performed on the emission sources, including corrective actions.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these monitoring and recordkeeping activities are met.
- e. The monitoring and recordkeeping requirements in Section 2.1 D.5.b and c **OR** Section 2.1 D.6. g through m, as applicable, shall be sufficient to ensure compliance with 15A NCAC 02D .0530 for the natural gas-fired hot oil heaters (**ID Nos. ES-18, ES-19, and ES-20**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these monitoring and recordkeeping requirements are not met.
- f. The Permittee shall comply with the work practice standards and maintenance requirements and associated recordkeeping and reporting as required by 40 CFR 40 Part 63 Subpart ZZZZ and CFR 40 Part 60 Subpart IIII, as applicable, for the emergency diesel fuel-fired engines (**ID Nos. ES-21 and I-DFF**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these monitoring and recordkeeping requirements are not met.
- g. No monitoring or recordkeeping is required for VOC emissions from the MDF storage tanks cited in Table 2.2.B.2. above.
- h. The Permittee shall conduct the following monitoring and recordkeeping activities for the MDF facilities operations in Table 2.2 B.2 above.
 - i. The Permittee shall record the monthly throughput for each emission source in either ODMT or MSF, as appropriate.
 - ii. The Permittee shall install and operate a continuous temperature monitoring system on the biofilter (**ID No. CD18**). The continuous temperature monitor shall meet the requirements under 40 CFR 63.2269(a) and (b), as applicable.
 - iii. The Permittee shall maintain the 24-hour block temperatures of the biofilter within the minimum and maximum bed temperatures established during testing (**ID No. CD18**) in accordance with Table 2 of 40 CFR Part 63 Subpart DDDD.
 - iv. For biofilter bed temperature monitoring, the Permittee shall monitor and collect data according to 40 CFR 63.2270.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the biofilter bed temperature range is not maintained or if the monitoring and recordkeeping requirements are not met.

Reporting Requirements [15A NCAC 02Q .0508(f)]

- i. The Permittee shall submit the results of any maintenance performed on the biofilter (**ID No. CD18**) within 30 days of a written request by the DAQ.
- j. The Permittee shall submit a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2.3 - Schedule of Compliance

A. Special Order of Consent (SOC 2015-002)

On September 14, 2015, the NCDAQ received notification indicating that the Photochemical Gas Treatment (PGT) systems at Arauco Panels USA, LLC (Arauco) in Moncure, Chatham County, North Carolina were shut down on September 10, 2015. The PGT systems were installed at Arauco, in part, to control hazardous air pollutants from various air emission sources subject to 40 CFR Part 63 Subpart DDDD, "NESHAP for Plywood and Composite Wood Products." These systems were installed in accordance with the "add-on control system" option in 40 CFR Part 63 Subpart DDDD (40 CFR 63.2240). With the shutdown of the PGT systems, Arauco could no longer demonstrate compliance with 40 CFR Part 63 Subpart DDDD, and NCDAQ issued a Notice of Violation to Arauco on September 23, 2015. Arauco entered into SOC 2015-002 with NCDAQ to address the violation of 40 CFR Part 63 Subpart DDDD, and the SOC became final on November 2, 2015. The SOC will expire on September 20, 2020.

The SOC also addressed the possibility decommissioning the PGT systems in the MDF facilities could result in an exceedance of the PSD avoidance limit for VOC emissions under Section 2.2 B.1.a of Air Permit No. 03449T45. In the event the PSD avoidance limit for VOC emissions was exceeded, Paragraph II.A.ii of SOC 2015-002 required the Permittee to submit a PSD application if deemed necessary by the NCDAQ. Per a letter dated October 17, 2016, NCDAQ deemed it necessary that Arauco submit a PSD permit application because VOC emissions from the MDF plant had exceeded the PSD avoidance limit from June through September 2016. (Note exceedances of the PSD avoidance limit have been ongoing since June 2016.) The PSD application was due within 120 receipt of the letter or February 14, 2017, and a complete application was received on February 13, 2017.

The schedule of compliance for the MDF Plant, as provided in Paragraph II.A of SOC 2015-002 and as required in accordance with 40 CFR 70.5(c)(8) and 70.6(c)(3), is as follows:

1. In the event that the Permittee exceeds the permitted PSD avoidance limit for VOC from the MDF Plant, the Permittee shall officially notify the DAQ by letter within 14 days following the end of the month that the PSD avoidance limit exceedance occurs. If deemed necessary by the DAQ Director, the Permittee shall submit a PSD permit application within 120 days of notification by the DAQ. The DAQ Director issued the request letter on October 17, 2016, and the Permittee submitted the completed PSD permit application on February 13, 2017.
2. Within 90 days after the effective date of the SOC on November 2, 2015, the Permittee shall submit a permit application for to the installation of the biofilter to replace the MDF PGT systems. The required permit application was submitted on January 9, 2016, and the resultant revised permit was issued on July 1, 2016.
3. The Permittee shall sign the necessary contract(s) for the purchase and installation of the biofilter within 6 months after issuance of the revised permit by DAQ.
4. The Permittee shall commence construction according to the specifications in the contract(s) within 3 months after signing of the purchasing contracts.
5. The Permittee shall complete the installation according to the terms of the contract(s) within 20 months after issuance of the revised permit.
6. The Permittee shall submit a test protocol at least 60 days prior to the compliance test.
7. The Permittee shall conduct engineering evaluation, shakedown, and compliance testing to demonstrate compliance with applicable permit requirements and submit a test report within 180 days after completion of installation.
8. In accordance with 70.6(c)(3), the Permittee shall submit a semiannual progress report, acceptable to the Regional Air Quality Supervisor, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The progress report shall contain the following:
 - a. Dates for achieving the activities, milestones, or compliance required in this schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

2.4- Permit Shield for Non-Applicable Requirements

The Permittee is shielded from the following non-applicable requirements [15A NCAC 02Q .0512(a)(1)(A) and (B)].

- A. New Source Performance Standard (NSPS) Subpart Db is not applicable to the bio-mass fired Energy System (**ID No. ES-02A**) because the system is considered a process heater and the primary purpose is to produce a final product.

SECTION 3 - GENERAL CONDITIONS (version 5.0, 06/08/2017)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NO_x budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application;
 - b. changes that modify equipment or processes; or
 - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A. Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]
“Excess Emissions” - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

“Deviations” - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B. Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall

comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)** – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. Specific Permit Modifications [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the

application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound